- **field fortifications** (JP 1-02, NATO) An emplacement or shelter of a temporary nature which can be constructed with reasonable facility by units requiring no more than minor engineer supervisory and equipment participation. (See also battle position (BP), emplacement, and strongpoint (SP).) See FM 5-103.

 3-12, 3-33
- **field services** Essential services to enhance a soldier's quality of life during operations. They include food preparation, water purification, mortuary affairs support, airdrop support, laundry and shower services, and cloth and light textile repair. See FM 10-1.
- **field trains** The combat service support portion of a unit at company, battalion, and brigade level that is positioned in the brigade support area with the forward support battalion and other support elements pushed forward from the division main support battalion. At company level, supply and mess teams normally will be located in the battalion field trains. A battalion's field trains may include mess teams and the portion of the supply section of the support platoon, a maintenance element, and ammunition and petroleum, oils, and lubricants (POL) elements not forward in the combat trains. (See also combat trains and unit trains.) See FMs 7-30, 7-123, 63-2, and 63-20. **4-23**
- **field trains command post (FTCP)** (Army) At the battalion and squadron levels, the place from which the HHC/HHT commander controls the field trains operations. See FMs 7-7, 7-8, and 7-20. **A-3**
- **fighter liaison officer (FLO)** (Army) A member of the tactical air control party. He is responsible to the corps air liaison officer (ALO) and provides specific knowledge and expertise on the employment of fighter attack aircraft.
- **final coordination line (FCL)** A line close to the enemy position used to coordinate the lifting or shifting of supporting fires with the final deployment of maneuver elements. It should be recognizable on the ground. It is not a fire support coordination measure. (See also assault.) See FMs 7-7, 7-8, 7-10, 7-20, 7-30, and 71-123. 3-16
- **final protective fire (FPF)** (JP 1-02, NATO) An immediately available prearranged barrier of fire designed to impede enemy movement across defensive lines or areas. (See also battle position (BP), defend, and final protective line (FPL).) See FMs 7-7, 7-8, 7-10, 7-20, 7-30, and 71-123.
- **final protective line (FPL)** A line of fire selected where an enemy assault is to be checked by interlocking fire from all available weapons and obstacles. (See also dead space, field of fire, final protective fire (FPF), and principal direction of fire (PDF).) See FMs 6-20 series, 7-7, 7-8, 7-10, 7-20, 7-30, and 71-123.
- fire (JP 1-02, NATO) 1. The command given to discharge a weapon(s). 2. To detonate the main explosive charge by means of a firing system. (Army) 1. The act of discharging a weapon(s), launching rockets and missiles, or detonating an explosive. 2. The receiving of the effects of weapon(s) ammunition and explosions.
- fire base (FB) 1. An area used during air assault operations from which a unit is moved via helicopters and supports the air assault operation's main effort with direct or indirect fires. 2. An area in hostile or insurgent territory which has a 360-degree defense and which supports combat patrols or larger operations with combat support and combat service support assets. (See also echelonment.) See FM 71-100-3.
- **fire command** A specific sequence of information given by a control authority (for example, a vehicle commander or fire direction center) that causes a crew to begin performing a sequence of actions and

provides detailed direction to choose the ammunition type, aim the weapon, and engage the target. Each element given by the controller requires a response from a crew member to ensure correct aiming and engagement. After the initial fire command, subsequent fire commands using the same sequence of information can be used to adjust the point of impact to ensure the desired target effect. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.

- **fire direction center (FDC)** (JP 1-02, NATO) That element of a command post, consisting of gunnery and communication personnel and equipment, by means of which the commander exercises fire direction and/or fire control. The fire direction center receives target intelligence and requests for fire, and translates them into appropriate fire direction. (Army) Provides timely and effective tactical and technical fire control in support of current operations. See FMs 6-20 series and 7-90.
- **fire for effect** (JP 1-02, NATO) **1.** Fire which is delivered after the mean point of impact or burst is within the desired distance of the target or adjusting/ranging point. **2.** Term in a call for fire to indicate the adjustment/ranging is satisfactory and fire for effect is desired. (Army) That volume of fires delivered on a target to achieve the desired effect. (See also destroy, final protective fire (FPF), fire mission, neutralize, and suppression.) See FMs 7-7, 7-8, 7-10, 7-20, 7-30 and 71-123.
- **fire mission** (JP 1-02, NATO) **1.** Specific assignment given to a fire unit as part of a definite plan. **2.** Order used to alert the weapon/battery area and indicate that the message following is a call for fire. (See also call for fire, cease loading, and fire support element (FSE)) See FMs 6-20 series and 7-90.
- **fire and movement** The concept of applying fires from all sources to suppress, neutralize, or destroy the enemy, and the tactical movement of combat forces in relation to the enemy (as components of maneuver is applicable at all echelons). At the squad level, it entails a team placing suppressive fire on the enemy as another team moves against or around the enemy. (See also bounding overwatch, formation, movement technique, and support by fire.) See FMs 7-7, 7-8, 7-10, 7-20, 7-30, and 71-123.
- **fire plan** (JP 1-02, NATO) A tactical plan for using the weapons of a unit or formation so that their fire will be coordinated. (See also offensive operations, defend, air defense, fire support, and final protective fire (FPF).) See FMs 6-20 series, 7-7, 7-8, 7-10, 7-20, 7-30, and 71-123.
- **firepower** (JP 1-02, NATO) **1.** The amount of fire which may be delivered by a position, unit, or weapon system. **2.** Ability to deliver fire. (Army) The potential capacity (product) of all weapons and attack systems available to the force commander. (See also combat power; fire plan; and mission, enemy, terrain, troops, and time available (METT-T).) See FMs 1-113, 6-20, 7-10, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **fires** The delivery of all types of ordnance through both direct and indirect means, as well as nonlethal means, that contribute to the destruction, disruption, or suppression of the enemy; facilitate tactical movement; and achieve a decisive impact. See FMs 6-20 series, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **fire support** The collective and coordinated integration and synchronization of the fires and effects of armed aircraft, land-based and sea-based indirect fire systems, and electronic warfare systems that directly support combat forces against ground targets to delay, disrupt, destroy, divert, damage, and limit enemy forces, combat formations, and facilities in pursuit of operational and tactical objectives. (See also combined arms and fire support plan.) See FMs 6-20 series, 7-20, 7-30, 17-95, 71-100, 100-5, and 100-15.

- **fire support area** (FSA) (Army) A sea area in which a ship may position or cruise while firing in support of ground forces. (See also fire support station (FSS) and naval gunfire support (NGFS.) See FM 6-series.
- **fire support coordinating measure** (JP 1-02) A measure employed by land or amphibious commanders to facilitate the rapid engagement of targets and simultaneously provide safeguards for friendly forces. (Army) In close coordination with supporting air asset commanders. (See also fire support coordination.) See FMs 6-20 series, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **fire support coordination** (JP 1-02, NATO) The planning and executing of fire so that targets are adequately covered by a suitable weapon or group of weapons. (See also fire support coordinating measure.) See FMs 6-20 series, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- fire support coordination line (FSCL) (JP 1-02) A line established by the appropriate land or amphibious force commander to ensure coordination of fire not under the commander's control but which may affect current tactical operations. The FSCL is used to coordinate fires of air, ground, or sea weapons systems using any type of ammunition against surface targets. The FSCL should follow well-defined terrain features. The establishment of the FSCL must be coordinated with the appropriate tactical air commander and other supporting elements. Supporting elements may attack targets forward of the FSCL without prior coordination with the land or amphibious force commander provided the attack will not produce adverse surface effects on or to the rear of the line. Attacks against surface targets behind this line must be coordinated with the appropriate land or amphibious force commander. (Army) — A permissive fire control measure established and adjusted by the ground commander in consultation with superior, subordinate, supporting, and other affected commanders. It is not a boundary; synchronization of operations on either side of the FSCL is the responsibility of the establishing commander out to the limits of the land component forward boundary. It applies to all fires of air, land, and sea weapon systems using any type of ammunition against surface targets. Forces attacking targets beyond the FSCL must inform all affected commanders to allow necessary coordination to avoid fratricide. (See also boundary, coordinated fire line (CFL), and fire support coordinating measure.) See FMs 6-20 series, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, and JP 3-0. **3-21**
- **fire support element (FSE)** A functional portion of a force tactical operations center that provides centralized targeting, coordination, and integration of fires delivered on surface targets by fire support means under the control of or in support of the force. This element is staffed from the field artillery headquarters or field artillery staff section of the force and representatives of other fire support means. (See also fire support coordinating measure and fire support plan.) See FMs 6-20 series, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **fire support plan** A plan on how indirect fires and target acquisition will be used to support an operation. It should include a portion for each means of fire support involved. See also counterfire, fire support, fire support coordination, list of targets, operation order (OPORD), and target list.) See FMs 6-20 series and 101-5.
- **fire support station (FSS)** (Army) A specified position at sea from which a ship must fire in support of ground forces. This is very restrictive and puts the ship at greatest risk. (See also fire support area (FSA) and naval gunfire support (NGFS).) See FM 6-20 series. 3-23
- **fire support team (FIST)** (Army) In fire support operations, a team comprised of a team chief (field artillery lieutenant) and the necessary additional personnel and equipment required to plan, request, coordinate, and

- direct fire support efforts for company-sized units. (See also fire support element (FSE).) See FMs 6-20-20 and 7-10. 4-15
- **firing circuit** (JP 1-02) **1.** In land operations, an electrical circuit and/or pyrotechnic loop designed to detonate connected charges from a firing point. **2.** In naval mine warfare, that part of a mine circuit which either completes the detonator circuit or operates a ship counter. See FMs 5-71-100 and 5-250.
- **first destination reporting point (FDRP)** (Army) A point manned by a movement regulating team, a movement control team, or military police that diverts a driver and cargo to an alternate consignee or destination. See FM 55-10.
- **fix** (JP 1-02, NATO) A position determined from terrestrial, electronic, or astronomical data. (See also way point.) (Army) **1.** A tactical task in which actions are taken to prevent the enemy from moving any part of his forces either from a specific location or for a specific period of time by holding or surrounding them to prevent their withdrawal for use elsewhere. **2.** A tactical obstacle effect that integrates fire planning and obstacle effort to slow an attacker within a specified area—normally an engagement area. (See also block, contain, disrupt, support by fire, and turn.) See FMs 1-112, 5-71-100, 5-102, 7-7, 7-8, 7-10, 7-20, 7-30, 17-95, 71-100, 71-123, 90-7, 100-5, and 100-15.
- **flank guard** (JP 1-02, NATO) A security element operating to the flank of a moving or stationary force to protect it from enemy ground observation, direct fire, and surprise attack. (See also screen and security operations.) See FMs 1-111, 1-112, 1-116, 7-20, 7-30, 17-95, 71-100, 71-123, and 100-5. **C-11**
- **flash blindness** (JP 1-02, NATO) Impairment of vision resulting from an intense flash of light. It includes temporary or permanent loss of visual functions and may be associated with retinal burns. (See also dazzle and directed-energy warfare (DEW).) See FM 100-30.
- flight coordination center (FCC) (Army) A primary Army air traffic control agency that is subordinate to the flight operations center (FOC). It provides flight following as well as information on air traffic movement within its assigned area; monitors Army aircraft operations and provides hostile activity warnings to Army aviation units operating in the airspace; passes instrument flight rules flight plans to the airspace management center for approval and visual flight rules flight plans to the appropriate air traffic services facility; establishes liaison with the air defense command post; and provides a communications link between terminal facilities of existing airfields, other nearby airfields, division command posts, other FCCs, and the FOC when the FCC locates in a division area. See FMs 1-111 and 100-103.
- **flight corridor** A restricted air route of travel specified for use by friendly aircraft and established to prevent friendly aircraft from being fired on by friendly forces. It is used to deconflict artillery firing positions with aviation traffic. (See also air control point (ACP), air corridor, communications checkpoint (CCP), and low-level transit route (LLTR).) See FMs 1-111, 71-100-3, and 100-103.
- **flight following** (JP 1-02, NATO) The task of maintaining contact with specified aircraft for the purpose of determining *en route* progress and/or flight termination. (See also air control point (ACP), air corridor, and communications checkpoint (CCP).) See FMs 1-111 and 100-103.
- **flight operations center** (FOC) (JP 1-02) The element of the tactical Army air traffic regulation system which provides for aircraft flight following, separation of aircraft under instrument conditions, and identification of friendly aircraft to friendly air defense agencies. (Army) The senior Army Air Traffic Control Agency for an Army corps. It is normally collocated with the USAF Control and Reporting Center (CRC). As a minimum, the CRC and FOC are electronically connected. The FOC locates in the corps area of operations;

- conducts flight following, and supervises the operations of the flight coordination center, but is primarily an information center. See FM 1-111.
- **float** Logistics support that provides major assembly replacement for a piece of equipment which is repairable but will take an extraordinary amount of time to repair.
- **follow** A term used to broadly define the order of movement of committed or uncommitted combat, combat support, and combat service support forces in a given combat operation. The term is a tactical task in which maneuver control measures must be used.
- **follow and assume** An operation in which a committed force follows a force conducting an offensive operation and is prepared to continue the mission of the force it is following when that force is fixed, attrited, or otherwise unable to continue. Such a force is not a reserve but is committed to accomplish specified tasks. (See also attack and offensive operations.) See FMs 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **follow-on echelon** Forces moved into the objective area by air or surface after the assault echelon of an airborne, air assault, or amphibious operation to sustain the defense and to conduct offensive operations as part of the larger force after linkup. Normally, it includes follow-on elements of the maintenance unit, headquarters elements, and elements of the supply and service battalion. (See also air assault, assault echelon, and rear echelon.) See FMs 1-111, 7-20, 7-30, 71-100-2, 71-100-3, 90-4, and 90-26.
- **follow and support** An operation in which a committed force follows and supports the mission accomplishment of a force conducting an offensive operation. Such a force is not a reserve but is committed to accomplish any or all of these tasks: destroy bypassed units; relieve in place any direct pressure or encircling force that has halted to contain the enemy; block movement of enemy reinforcements; secure lines of communication; guard prisoners, key areas, and installations; secure key terrain; and control refugees. (See also direct pressure force, encircling force, exploitation, and pursuit.) See FMs 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, and 101-5.
- **force projection** The movement of military forces from the continental United States (CONUS) or a theater in response to requirements of war or stability and support operations. Force-projection operations extend from mobilization and deployment of forces, to redeployment to CONUS or home theater, to subsequent mobilization. Force projection includes the following eight stages: mobilization; predeployment activity; deployment; entry operations; operations; war termination and post conflict operations; redeployment and reconstitution; and demobilization. See FMs 71-100, 100-5, 100-15, 100-20, and 100-30.
- **force protection** (JP 1-02) Security program designed to protect soldiers, civilian employees, family members, facilities, and equipment, in all locations and situations, accomplished through planned and integrated application of combatting terrorism, physical security, operations security, personal protective services, and supported by intelligence, counterintelligence, and other security programs. (Army) One of the four primary elements that combine to create combat power. It conserves the fighting potential of a force. The four components of force protection are: operational security and deception operations; the soldier's health and morale; safety; and the avoidance of fratricide. (See also peace operations.) See FMs 100-5, 100-15, and 100-23.
- **ford** A shallow part of a body of water or wet gap that can be crossed without bridging, boats, ferries, or rafts. It is a location in a water barrier where the physical characteristics of current, bottom, and approaches permit the passage of personnel, vehicles, and other equipment where the wheels or tracks remain in contact with

the bottom at all times. (See also gap, reconnaissance (recon, recce), and river crossing.) See FMs 5-100, 5-101, and 17-95. 3-28

- **foreign internal defense (FID)** (JP 1-02) Participation by civilian and military agencies of a government in any of the action programs taken by another government to free and protect its society from subversion, lawlessness, and insurgency. See FM 100-20.
- **formation** (JP 1-02, NATO) **1.** An ordered arrangement of troops and/or vehicles for a specific purpose. **2.** An ordered arrangement of two or more ships, units, or aircraft proceeding together under a commander. (Army) Types of formations include: box, column, diamond, line, vee, wedge, echelon (right or left). (See also box formation, column formation, diamond formation, echelon formation, line formation, movement technique, vee formation, and wedge formation.) See FMs 1-111, 1-112, 7-7, 7-8, 7-10, 7-20, 7-30, 17-95, 71-100, and 71-123.
- **form of tactical operations** (Army) A distinct tactical activity with a unique set of doctrinal characteristics, such as movement to contact or area defense. (See also choices of maneuver, tactical task, and type of operation.)

forward area — A location near an enemy or a hostile force or persons.

- **forward arming and refueling point (FARP)** A temporary facility that is organized, equipped, and deployed by an aviation commander, and is normally located in the main battle area closer to the area of operations than the aviation unit's combat service support area. It provides fuel and ammunition necessary for the employment of aviation maneuver units in combat. It permits combat aircraft to rapidly refuel and rearm simultaneously. See FMs 1-111, 7-30, 71-100, 100-15, and 100-103.
- **forward assembly area** (FAA) (Army) A temporary area where aviation units gather to prepare for a mission that is forward of the aviation brigade's assembly area and airfield, but not as far forward as the attack position. Aircraft may be in the FAA for short or long durations based on METT-T. See FMs 1-111 and 71-100-3.
- **forward boundary** The farthest limit, in the direction of the enemy, of an organization's responsibility. The organization is responsible for deep operations to that limit. The next higher headquarters is responsible for coordinating deep operations beyond that limit. In offensive operations, the forward boundary may move from phase line to phase line, depending on the battlefield situation.

 3-11
- **forward defense** A choice of defensive maneuver where the majority of a unit's combat power is deployed in a generally linear manner along or near the forward edge of the battle area (FEBA). Security, reconnaissance, and counterreconnaissance forces are employed forward of the FEBA. The objective of this choice of maneuver is to destroy the enemy in the vicinity of the FEBA. Counterattacks forward of the defending forces are critical to this choice of maneuver. The perimeter defense is a type of forward defense. (See also choices of maneuver and defensive operations.)
- forward edge of the battle area (FEBA) (JP 1-02, NATO) The foremost limits of a series of areas in which ground combat units are deployed, excluding the areas in which the covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the maneuver of units. (See also main battle area (MBA).) See FMs 1-111, 6-20 series, 7-20, 7-30, 71-100, 71-123, 100-5, and 100-15.

- forward line of own troops (FLOT) (JP 1-02) A line which indicates the most forward positions of friendly forces in any kind of military operation at a specific time. The FLOT normally identifies the forward location of covering and screening forces. (Army) The FLOT may be at, beyond, or short of the FEBA. An enemy FLOT indicates the forward most position of hostile forces. (See also line of contact (LC).) See FMs 1-111, 6-20 series, 7-20, 7-30, 71-100, 71-123, 100-5, and 100-15.
- **forward logistics base (FLB)** (Army) The area occupied by multifunctional forward logistics elements of a support battalion, group, or command when it echelons its assets to provide critical support to combat forces. This base may be the first stage of the development of a support area. See FM 10-1.
- **forward logistics element (FLE)** (Army) A multifunctional forward logistics element task-organized to support fast-moving offensive operations, early phases of contingency operations, and units geographically separated from normal support channels. The FLE operates out of a forward logistics base. See FM 63-2-1.
- **forward observer (FO)** (JP 1-02) An observer operating with front line troops and trained to adjust ground or naval gunfire and pass back battlefield information. In the absence of a forward air controller, the observer may control close air support strikes. See FMs 6-20 serie and 7-10.
- **forward operating base (USMC)** An airfield used to support tactical operations without establishing full support facilities. The base may be used for an extended time period. Support by a main operating base will be required to provide backup support for a forward operating base. See FMFRP 0-14.
- **forward operations base (FOB)** (JP 1-02) In special operations, a base usually located in friendly territory or afloat that is established to extend command and control or communications or to provide support for training and tactical operations. Facilities may be established for temporary or longer duration operations and may include an airfield or an unimproved airstrip, an anchorage, or a pier. A forward operations base may be the location of special operations component headquarters or a smaller unit that is controlled and/or supported by a main operations base. (See also advanced operations base (AOB) and main operations base (MOB).) See FMs 71-100-3 and 100-25.
- **forward-presence units** Those US active component forces and reserve forces assigned or deployed overseas in a specific theater.
- forward slope (JP 1-02, NATO) Any slope which descends toward the enemy. See FM 21-26.
- **fragmentary order (FRAGO)** (JP 1-02) An abbreviated form of an operation order, usually issued on a day-to-day basis, that eliminates the need for restating information contained in a basic operation order. It may be issued in sections. (Army) A form of operation order which contains information of immediate concern to subordinates. It is an oral, a digital, or a written message that provides brief, specific, and timely instructions without loss of clarity. It is issued after an operation order to change or modify that order or to execute a branch or sequel to that order. See FM 101-5.
- **fratricide** The employment of friendly weapons and munitions with the intent to kill the enemy or destroy his equipment or facilities, which results in the unforeseen or unintentional death, injury, or damage to friendly personnel or equipment. See FMs 1-111, 6-20, 7-7, 7-8, 7-10, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, and 101-5.
- **free fire area** (**FFA**) A specific designated area into which any weapon system may fire without additional coordination with the establishing headquarters. Normally, it is established on identifiable terrain by division or higher headquarters. (See also fire support coordination and rules of engagement (ROE).) See FM 6-20 series. 3-21

- **friendly** (JP 1-02) A contact positively identified as friendly. (Army) It may be part of the same force, whether allied, joint, coalition, partisan, or multinational.
- **friendly fire** (JP 1-02) In casualty reporting, a casualty circumstance applicable to persons killed in action or wounded in action mistakenly or accidentally by friendly forces actively engaged with the enemy, who are directing fire at a hostile force or what is thought to be a hostile force. (See also casualty and fratricide.)
- **friendly force information requirements (FFIR)** Information the commander and staff need about the forces available for the operation. This includes personnel, maintenance, supply, ammunition, and petroleum, oils, and lubricants (POL) status, and experience and leadership capabilities. (See also battle-field visualization and commander's critical information requirements (CCIR). See FMs 34-1, 71-100, 100-15, and 101-5.
- front (JP 1-02, NATO) 1. The lateral space occupied by an element measured from the extremity of one flank to the extremity of the other flank. 2. The direction of the enemy. 3. The line of contact of two opposing forces. 4. When a combat situation does not exist or is not assumed, the direction toward which the command is faced. (See also forward edge of the battle area (FEBA) and forward line of own troops (FLOT).) See FMs 1-111, 6-20, 7-7, 7-8, 7-10, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **frontage** The width of the front plus that distance beyond the flanks covered by observation and fire by a unit in combat. (See also front.)
- **frontal attack** (JP 1-02, NATO) **1.** An offensive maneuver in which the main action is directed against the front of the enemy forces. (DOD) **2.** In air intercept, an attack by an interceptor aircraft that terminates with a heading crossing angle greater than 135 degrees. (Army) Strikes the enemy across a wide front and over the most direct approaches. It is normally used when commanders possess overwhelming combat power and the enemy is at a clear disadvantage. (See also assault and offensive operations.) See FMs 1-111, 7-7, 7-8, 7-10, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **full mission capable (FMC)** (JP 1-02) Material condition of an aircraft or training device indicating that it can perform all of its missions. (See also deadline.) See FMs 63-2, 63-2-1, 63-6, 63-20, and 63-21.

full mobilization. See mobilization.

functional component command (JP 1-02) — A command normally, but not necessarily, composed of forces of two or more Military Departments which may be established across the range of military operations to perform particular operational missions that may be of short duration or may extend over a period of time. (See also command relationship.) See FMs 100-5, 100-15, and JP 3-0.

G

- **GA** the symbol for the nerve agent tabun. See FM 3-9.
- gap (JP 1-02, NATO) An area within a minefield or obstacle belt, free of live mines or obstacles, whose width and direction will allow a friendly force to pass through in tactical formation. (Army) 1. Any break or breach in the continuity of tactical dispositions or formations beyond effective small arms coverage.
 2. A portion of a minefield of specified width in which no mines have been laid to enable a friendly force to pass through in tactical formation.
 3. A ravine, mountain pass, or river that presents an obstacle that must

- be bridged. (See also lane.) See FMs 5-100, 7-7, 7-8, 7-10, 7-20, 7-30, 34-130, 71-100, 71-123, and 90-13-1. 3-28
- **GB** the symbol for the nerve agent sarin. See FM 3-9.
- **GD** the symbol for the nerve agent soman. See FM 3-9.
- general support (GS) (JP 1-02, NATO) That support which is given to the supported force as a whole and not to any particular subdivision thereof. (See also direct support (DS) and general support-reinforcing (GSR).) See FMs 6-20 series and 10-1.
- general support artillery (JP 1-02, NATO) Artillery which executes the fire directed by the commander of the unit to which it organically belongs or is attached. It fires in support of the operation as a whole rather than in support of a specific subordinate unit. (Army) A tactical artillery mission. (See also direct support artillery, general support-reinforcing (GSR), and reinforcing.) See FM 6-20 series.
- general support-reinforcing (GSR) (JP 1-02) A tactical artillery mission. General support-reinforcing artillery has the mission of supporting the force as a whole and of providing reinforcing fires for another artillery unit. (See also direct support (DS), general support (GS), and reinforcing.) See FM 6-20 series.
- **general war** (JP 1-02) Armed conflict between major powers in which the total resources of the belligerents are employed, and the national survival of a major belligerent is in jeopardy. (See also conflict, military operations other than war (MOOTW), and stability and support operations (SASO).)
- **germ** A disease producing microorganism, microbe, or pathogenic bacterium. The term includes bacteria, rickettsiae, viruses, and fungi. (See also decontamination.) See FMs 3-4 and 3-9.
- **global information environment (GIE)** (Army) Individuals, organizations, and systems, outside the sphere of military or National Command Authorities control, that gather, process, or disseminate information to national and international audiences. See FM 100-6.
- **global positioning system (GPS)** A satellite-based system used for accurate positioning and navigation. (See also way point.) See FM 21-26.
- graphic (JP 1-02, NATO) Any and all products of the cartographic and photogrammetric art. A graphic may be a map, chart, or mosaic or even a film strip that was produced using cartographic techniques. (Army) A hand-drawn or computer-generated picture or symbol that represents units, equipment, suspected or templated enemy units and sites, sites or facilities, control measures, and so forth. Term relates to the design, creation, and preparation of two- or three-dimensional visual products. See AR 25-1.
- **graves registration** (Army) A subprogram of mortuary affairs that provides for search, recovery, initial identification, and temporary burial of deceased personnel in temporary burial sites and provides maintenance and care of burial sites and the handling and disposition of personal effects.
- **gray lists** Lists that identify and locate those personalities whose inclinations and attitudes toward the political and military objectives of the United States are obscure. Individuals may be listed on grey lists when they are known to possess information or particular skills required by US forces. **D-4**
- **gray water** Any nontoilet water (nonsewage) which is nonpotable because of its having been used in some way (for example, water from sinks, bathtubs, showers, or laundry operation).

- **grazing fire** (JP 1-02, NATO) Fire approximately parallel to the ground where the center of the cone of fire does not rise above 1 meter from the ground. (See also direct fire, final protective line (FPL), and dead space.) See FMs 7-7, 7-8, and 7-10.
- **Greenwich Mean Time (GMT) (ZULU)** Mean solar time measured at the prime meridian which runs through Greenwich, England. It is used as the basis for calculating time throughout most of the world. (See also Universal Time and ZULU time.) See FM 101-5.
- **grey propaganda** (JP 1-02) Propaganda that does not specifically identify any source.
- **grid azimuth** An angle of direction referenced to grid north. It differs from true azimuth by the amount of the grid convergence. (See also azimuth.) See FM 21-26.
- **grid convergence** (JP 1-02) The horizontal angle at a place between true north and grid north. It is proportional to the longitude difference between the place and the central meridian. (See also grid azimuth and magnetic azimuth.) See FM 21-26.
- grid coordinates (JP 1-02, NATO) Coordinates of a grid coordinate system to which numbers and letters are assigned for use in designating a point on a gridded map, photograph, or chart. (Army) The easting and northing values (of a grid) that designate the location of a point in respect to the grid. Coordinates usually are expressed to the nearest 100, 10, or 1 meter, with the easting and northing values combined into a single expression. Examples: NK 329378 (nearest 100 meters); NK 32943785 (nearest 10 meters); or NK 3294837853 (nearest 1 meter). See FM 21-26.
- **grid north** (JP 1-02, NATO) The northerly or zero direction indicated by the grid datum of directional reference. See FM 21-26.
- **ground combat element (GCE)** (JP 1-02) The Marine air-ground task force (MAGTF) element that is task-organized to conduct ground operations. The GCE is constructed around an infantry unit and varies in size from a reinforced infantry battalion to one or more reinforced Marine division(s). The GCE also includes appropriate combat support and combat service support units. Normally, there is only one GCE in a MAGTF.
- **ground tactical plan** (Army) An airborne or air assault operational plan covering the conduct of operations in the objective area. (See also echelonment, landing plan, and marshalling plan.) See FMs 7-7, 7-10, 7-20, 7-30, 90-4, 90-26, 71-100-2, and 71-100-3.
- **ground zero** (**GZ**) (JP 1-02, NATO) The point on the surface of the Earth at, or vertically below or above, the center of a planned or actual nuclear detonation. (See also desired ground zero (DGZ).) See FMs 3-3-1, 100-30, JPs 3-12.2, and 3-12.3. 3-34
- group (JP 1-02) 1. A flexible administrative and tactical unit composed of either two or more battalions or two or more squadrons. The term also applies to combat support and combat service support units. 2. A number of ships and/or aircraft, normally a subdivision of a force, assigned for a specific purpose.
- group of targets (JP 1-02, NATO) Two or more targets on which fire is desired simultaneously. A group of targets is designated by a letter/number combination or a nickname. (See also fire plan.) See FM 6-20 series. 3-23

- **g-series nerve agents** A series of fluorine- or cyanide-containing organophosphate nerve agents (organophosphate derivatives of phosphoric acid). In their unmodified state they are colorless, volatile liquids. (See also GA, GB, and GD.) See FM 3-9.
- **guard** (JP 1-02, NATO) A security element whose primary task is to protect the main force by fighting to gain time, while also observing and reporting information. (Army) A form of security operation whose primary task is to protect the main force by fighting to gain time while also observing and reporting information, and to prevent enemy ground observation of and direct fire against the main body by reconnoitering, attacking, defending, and delaying. A guard force normally operates within the range of the main body's indirect fire weapons. (See also cover, flank guard, screen, and security operations.) See FMs 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- guerrilla warfare (JP 1-02, NATO) Military and paramilitary operations conducted in enemy-held or hostile territory by irregular, predominantly indigenous forces. (See also unconventional warfare (UW).) See FMs 90-8, 100-12, and 100-20.
- **gun-target line** (JP 1-02, NATO) An imaginary straight line from the gun(s) to the target. (See also observer-target line.) See FMs 6-series and 7-90.

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- **H** The symbol for Levinstein mustard, a blister agent. See FM 3-9.
- **habitual association** The close and continuous relationship established between support elements and the combat units they support or between combat units that frequently are cross-attached to ensure a mutual understanding of operating procedures and techniques and to increase overall responsiveness.
- handover line (JP 1-02, NATO) A control feature, preferably following easily defined terrain features, at which responsibility for the conduct of combat operations is passed from one force to another. (Army) —
 1. The handover line applies to other functions besides combat, such as intelligence, electronic warfare, and information warfare.
 2. The action is complete when the receiving commander acknowledges assumption of control authority. (See also phase line (PL).) See FMs 1-111, 7-10, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- hang fire (JP 1-02, NATO) An undesired delay in the functioning of a firing system. (Army) An undesired delay in the functioning of the primer or initiator part of a round of ammunition. See FMs 6-20 series, 7-91, 17-12, and 23-1.
- harassing fire (JP 1-02, NATO) Fire designed to disturb the rest of the enemy troops, to curtail movement, and, by threat of losses, to lower morale. (See also fire and fire support.) See FM 6-20 series.
- hasty attack (JP 1-02, NATO) In land operations, an attack in which preparation time is traded for speed in order to exploit an opportunity. (Army) Result of a meeting engagement—launched with the forces at hand and with minimum preparation to destroy the enemy before he is able to concentrate or establish a defense. (See also assault, attack, deliberate attack, and movement to contact.) See FMs 1-111, 1-112, 1-116, 7-7, 7-8, 7-10, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **hasty crossing** (JP 1-02, NATO) The crossing of an inland water obstacle using the crossing means at hand or those readily available, and made without pausing for elaborate preparations. (See also bridgehead and deliberate crossing.) See FMs 7-7, 7-20, 7-30, 17-95, 71-100, 71-123, 90-13, 100-5, and 100-15.

- hasty defense (JP 1-02, NATO) A defense normally organized while in contact with the enemy or when contact is imminent and time available for the organization is limited. It is characterized by improvement of the natural defensive strength of the terrain by utilization of foxholes, emplacements, and obstacles. (See also defend, deliberate defense, emplacement, and obstacle.) See FMs 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **hasty smoke** Smoke operations characterized by minimal planning and short duration to immediately counter enemy action. See FM 3-100.
- **hazard** Any real or potential condition that can cause injury, illness, or death of personnel, or damage to or loss of equipment or property.
- hazardous material Any substance which has a human health hazard associated with it. Special storage, use, handling, and shipment safety procedures and protocols must be followed to help protect against accidental human exposure. Hazardous materials are specifically identified under federal law.
- **hazardous substances** Materials specifically listed under federal regulations for which the spilling of certain quantities requires immediate reporting to federal agencies.
- **hazardous waste** A solid waste which is either listed as such in federal law or exhibits any of the four hazardous characteristics—ignitability, corrosivity, reactivity, or toxicity.
- **hazardous waste accumulation site** A specially designated site for the temporary collection of hazardous wastes where no container may remain on site for more than 90 days. The site, and containers within it, must be properly marked and certain safety and management procedures apply. There is no limitation on the quantity of wastes which may be kept on site.
- **haze** (**smoke**) A light concentration of smoke placed over friendly areas to restrict accurate enemy observation and fire. A smoke haze is not dense enough to disrupt friendly operations. See FM 3-50.
- **HD** The symbol for distilled Levinstein mustard, a blister agent. See FM 3-9.
- **heavy drop (HD)** (JP 1-02) A system of delivery of heavy supplies and equipment by parachute. See FM 10-1.
- height of burst (HOB) (JP 1-02, NATO) The vertical distance from the Earth's surface or target to the point of burst. (See also desired ground zero (DGZ) and ground zero (GZ).) See FM 100-30.
- **herbicide** (JP 1-02) A chemical compound that will kill or damage plants. (Army) The term includes defoliants, desiccants, plant-growth regulators, and soil sterilants. See FMs 3-9 and 3-100.
- **herringbone** An arrangement of vehicles at left and right angles to the line of march used to establish security during an unscheduled halt. See FMs 7-7, 17-15, and 55-2.
- **H-hour** (JP 1-02) The specific hour on D-day at which a particular operation commences. (Army) It may be the commencement of hostilities; the hour at which an operation plan is executed or is to be executed (as distinguished from the hour the order is issued); or the hour that the operation phase is implemented. The highest command or headquarters coordinating planning specifies the exact meaning of H-hour within the above definition. When several operations or phases of an operation are being conducted

- in the same area on D-day and confusion may arise over the use of the same hour designation, the letters F, L, S, W, and Y may be used. When this is done, the letters used and their meaning must be stated in the plan or order. Reference to hours preceding or following H-hour will be referred to by using a plus or minus sign and an Arabic numeral following the letter H. For example: H-3 is 3 hours prior to H-hour; H+7 is 7 hours after H-hour. If a time element other than hours is expressed, it must be spelled out (such as H+30 minutes). (See also D-day.)
- hide The positioning of a vehicle, individual, or unit so that no part is exposed to observation or direct fire. (See also concealment, cover, defilade, hull down, and turret down.) See FMs 7-7, 17-12, 17-15, and 23-1.
- high angle fire (JP 1-02, NATO) Fire delivered at angles of elevation greater than the elevation that corresponds to the maximum range of the gun and ammunition concerned; fire, the range of which decreases as the angle of elevation is increased. (Army) Fire delivered to clear an obstacle (such as a hill) that low-angle fire cannot, or fire delivered to attack targets on the reverse side of an obstacle (such as a hill) that cannot be attacked with low-angle or direct fire. See FMs 6-series and 7-90.
- high-density airspace control zone (HIDACZ) (JP 1-02) Airspace designated in an airspace control plan or airspace control order, in which there is a concentrated employment of numerous and varied weapons and airspace users. A high-density airspace control zone has defined dimensions, which usually coincide with geographical features or navigational aids. Access to a high-density airspace control zone is normally controlled by the maneuver commander. The maneuver commander can also direct a more restrictive weapons status within the high-density airspace control zone. (See also airspace coordination area (ACA) and restricted operating zone (ROZ).) See FMs 1-111 and 100-103.
- **high-payoff target (HPT)** A target whose loss to the threat will contribute to the success of the friendly course of action. See FMs 6-20 series and 34-130.
- **high-value target (HVT)** Assets that the threat commander requires for the successful completion of a specific course of action. See FMs 6-20 series and 34-130.
- **highway regulation** Planning, routing, scheduling, and deconflicting the use of main supply routes and other routes to provide order, prevent congestion, enforce priorities, and facilitate movement control. (See also main supply route (MSR) and alternate supply route (ASR).) See FMs 19-1 and 55-2.
- **HL** The symbol for a blister agent consisting of mustard-lewisite mixture. See FM 3-9.
- **HN** The symbol for nitrogen mustard, a blister agent. See FM 3-9.
- hold (JP 1-02, NATO) 1. A cargo stowage compartment aboard ship. 2. To maintain or retain possession of by force, as a position or an area. 3. In an attack, to exert sufficient pressure to prevent movement or redisposition of enemy forces. 4. As applied to air traffic, to keep an aircraft within a specified space or location which is identified by visual or other means in accordance with air traffic control instructions. (See also block, fix, and retain.) See FMs 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, 71-100, 71-123, 100-5, and 100-15.
- **hold fire** (JP 1-02, NATO) In air defense, an emergency order to stop firing. Missiles already in flight must be prevented from intercepting, if technically possible. See FM 44-100.
- **holding area** (Army) 1. A site located between assembly areas or forward arming and refueling points and battle positions (BPs) that may be occupied for short periods of time by attack helicopters while coordination

is being made for movement into BPs. It should provide good cover and concealment and an area for the aircraft to hover or land. See FMs 1-111, 1-112, and 1-116. **2.** Nearest covered and concealed position to the pickup zone or river crossing site where troops are held until time for them to move forward. See FMs 7-8, 7-10, 7-20, 7-30, 71-100-2, 71-100-3, and 90-13. **3.** Waiting area that forces use during traffic interruptions or deployment from an aerial or seaport of embarkation. See FMs 19-1 and 55-2.

holding line (Army) — In retrograde river crossing operations, the outer limit of the area established between the enemy and the water obstacle to preclude direct and observed indirect fires into crossing areas. (See also bridgehead line.) See FMs 7-30, 71-100, 71-123, 90-13, and 100-15.

hospital (JP 1-02) — A medical treatment facility capable of providing inpatient care. It is appropriately staffed and equipped to provide diagnostic and therapeutic services, as well as the necessary supporting services required to perform its assigned mission and functions. A hospital may, in addition, discharge the functions of a clinic.

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hostage (JP 1-02) — A person held as a pledge that certain terms or agreements will be kept. (The taking of hostages is forbidden under the Geneva Conventions, 1949.) See FM 100-20.

host country (JP 1-02) — A nation in which representatives or organizations of another state are present because of government invitation and/or international agreement. (See also civil military operations (CMO) and host nation). See FMs 100-5 and 100-20.

hostile (JP 1-02) — A contact positively identified as enemy. (Army) — An individual, a group of individu

als, or a nation which is antagon istic or opposes policies a n d actions of the United States and its allies. T h e actions of hostile can be political diploma tic, or at

a n y level of w a r .

See FM 100-20.

hostile acts (JP 1-02) — Basic rules established by higher authority for defining and recognizing hostile acts by aircraft, submarines, surface units, and ground forces that will be promulgated by the commanders of unified or specified commands, and by other appropriate commanders when so authorized.

hostile casualty (JP 1-02) — A person who is the victim of a terrorist activity or who becomes a casualty "in action." "In action" characterizes the casualty as having been the direct result of hostile action, sustained in combat or relating thereto, or sustained going to or returning from a combat mission provided that the occurrence was directly related to hostile action. Included are persons killed or wounded mistakenly or accidentally by friendly fire directed at a hostile force or what is thought to be a hostile force. However, not to be considered as sustained in action and not to be interpreted as hostile casualties are injuries or death due to the elements, self-inflicted wounds, combat fatigue, and except in unusual cases, wounds or death inflicted by a friendly force while the individual is in an absent-without-leave, deserter, or dropped-from-rolls status or is voluntarily absent from a place of duty. (See also casualty and nonhostile casualty.)

hostile criteria — Description of conditions under which an aircraft or a vehicle may be identified as hostile for engagement purposes. (See also hostile acts and rules of engagement (ROE).)

hostile environment — *See* operational environment.

host nation — A nation which receives the forces and/or supplies of allied or coalition nations and/or NATO organizations to be located on, to operate in, or to transit through its territory. (See also civil military operations (CMO) and host country.) See FMs 100-5 and 100-20.

host-nation support (JP 1-02) — Civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, crises or emergencies, or war based on agreements mutually concluded between nations. (See also civil military operations (CMO).) See FMs 100-5, 100-10, and 100-20.

H-series agents — A series of persistent blister agents that include distilled mustard (HD), and the nitrogen mustards. See FM 3-9.

HT — The symbol for a mustard-T mixture, a blister agent. See FM 3-9.

hull down — The positioning of an armored vehicle so that the muzzle of the gun or launcher is the lowest part of the vehicle exposed to the front. Hull-down positions afford maximum protection for vehicles that are engaging targets with direct fire. (See also hide and turret down.) See FMs 7-7, 17-12, 17-15, and 23-1.

human intelligence (HUMINT) (JP 1-02, NATO) — A category of intelligence derived from information collected and provided by human sources. See FMs 34-2 and 34-3.

humanitarian assistance (HA) (JP 1-02) — Programs conducted to relieve or reduce the results of natural or man-made disasters or other endemic conditions such as human pain, disease, hunger, or privation that might present a serious threat to life or that can result in great damage to or loss of property. Humanitarian assistance provided by US forces is limited in scope and duration. The assistance provided is designed to supplement or complement the efforts of the host nation civil authorities or agencies that may have the primary responsibility for providing humanitarian assistance. See FMs 8-42 and 100-20.

humanitarian assistance coordination center (HACC) — Normally a subordinate element of the civil military operations center that deals directly with those agencies and organizations involved in humanitarian assistance efforts. In certain situations, particularly when participation for a specific operation by US armed forces is not extensive, a HACC can be formed as a separate, stand-alone organization. See FM 100-20.

humanitarian and civic assistance (HCA) (JP 1-02) — Assistance to the local populace provided by predominantly US forces in conjunction with military operations and exercises. This assistance is specifically authorized by Title 10, United States Code, section 401, and funded under separate authorities. Assistance provided under these provisions is limited to (1) medical, dental, and veterinary care provided in rural areas of a country; (2) construction of rudimentary surface transportation systems; (3) well drilling and construction of basic sanitation facilities; and (4) rudimentary construction and repair of public facilities. Assistance must fulfill unit training requirements that incidentally create humanitarian benefit to the local populace. (See also humanitarian assistance (HA).) See FMs 8-42 and 100-20.

hybrid collective protection — A combination of overpressure and ventilated face-piece systems. See FM 3-4.

hydrolysis — Interaction of a chemical agent with water to yield a less toxic product or products. See FM 3-9.

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identification, friend or foe (IFF) (JP 1-02, NATO) — A system using electromagnetic transmissions to which equipment carried by friendly forces automatically responds, for example, by emitting pulses, thereby distinguishing themselves from enemy forces. (Army) — A device which emits a signal positively identifying it as a friendly. (See also air defense.) See FMs 1-111, 44-100, and 100-103.

identification, friend or foe (IFF) on/off line (Army) — A theater-directed phase line where aircraft involved in deep operations forward of the fire support coordination line turn off the aircraft IFF transponder *en route* to the target and turn on the transponder after completing the mission. (See also identification, friend or foe (IFF), and phase line (PL).) See FM 100-103.

imagery intelligence (IMINT) (JP 1-02) — Intelligence derived from the exploitation of collection by visual photography, infrared sensors, lasers, electro-optics, and radar sensors, such as synthetic aperture radar wherein images of objects are reproduced optically or electronically on film, electronic display devices, or other media. (See also intelligence.) See FMs 34-1, 34-3, and 34-10.

imitative electromagnetic deception (IED) (JP 1-02) — The introduction of electromagnetic energy into enemy systems that imitates enemy emissions. (Army) — Imitating enemy electromagnetic radiation (predominately communications) after intruding his electromagnetic channels to deceive him or to disrupt his operations. (See also command and control warfare (C²W), deception, electronic warfare (EW), manipulative electromagnetic deception, and simulative electromagnetic deception.) See FMs 34-1, 34-10, 34-40, 90-2, and 100-6.

immediate air support (JP 1-02, NATO) — Air support to meet specific requests which arise during the course of a battle and which by their nature cannot be planned in advance. (See also air support.) See FM 6-series.

immediate decontamination (JP 1-02, NATO) — Decontamination carried out by individuals upon becoming contaminated, to save life and minimize casualties. This may include decontamination of some personal clothing and/or equipment. (See also decontamination.) See FM 3-5.

- **immediate mission request** (JP 1-02) A request for an air strike on a target which by its nature could not be identified sufficiently in advance to permit detailed mission coordination and planning. (NATO: a request for immediate air support.)
- immediate permanent ineffectiveness, 8,000 cGy The physiological response to radiation at levels of 3,000 cGy for physically demanding tasks or 3,800 cGy for physically undemanding tasks. Personnel become ineffective within three minutes of exposure and remain ineffective until death. Death occurs within one day. See FM 3-3-1.
- immediate transient ineffectiveness (nuclear) The physiological response to radiation at levels of 2,000 cGy for physically demanding tasks or 2,800 cGy for physically undemanding tasks. Personnel irradiated by a nuclear explosion or accident become ineffective for any task within 3 minutes of exposure and remain so for approximately 7 minutes, independent of the physical demands of the task. Personnel recover to greater than 75 percent of their pre-exposure performance levels at around 10 minutes postexposure and remain so for around 30 minutes. At around 40 minutes postexposure, personnel become performance- degraded and remain so for around five hours for undemanding tasks (two hours for demanding tasks), at which time it is expected that radiation sickness symptoms will be present in sufficient severity to render the personnel ineffective. The personnel will remain ineffective until death occurs in five to six days. See FM 3-3-1 and JPs 3-12.2 and 3-12.3.
- implementation force (IFOR) A task-organized military command which is to execute and enforce an international treaty or agreement. This command performs the missions and tasks as defined in the treaty or agreement. The missions and tasks may include peace operations, nation building, peace enforcement, and humanitarian assistance. (See also peace operations and stability and support operations (SASO).) See FM 100-23.
- **incapacitating agent** (JP 1-02) An agent that produces temporary physiological or mental effects, or both, that will render individuals incapable of concerted effort in the performance of their assigned duties. See FM 3-9 and FM 3-100.
- **incendiary** A compound that generates sufficient heat to cause the target to catch fire or causes melting or burning of equipment. See FM 3-9.
- in-depth defense A choice of defensive maneuver that forces the enemy to attack through a series of mutually supporting friendly positions, causing the enemy's mass to be expended and his supporting forces to be unable to focus. This choice of maneuver reduces the risk of an enemy penetration and allows the enemy to gain terrain to wear him down and overextend his ability to sustain his attack. In-depth defense usually culminates in a friendly counterattack to complete the destruction of the enemy and regain lost terrain. (See also choices of maneuver and defensive operations.)
- **indirect approach** (Army) To attack an enemy at his weakness to cause his strength to be ineffective, ultimately resulting in his defeat.
- **indirect fire** (JP 1-02) Fire delivered on a target that is not itself used as a point of aim for the weapons or the director. (Army) Fire delivered on a target characterized by a relatively high trajectory and where the weapon operator normally does not have visual contact with the target. (See also direct laying.) See FMs 6-20 series and 7-90.
- **indirect illumination** (JP 1-02, NATO) Battlefield illumination provided by employing searchlight or pyrotechnic illuminants using diffusion or reflection. **a. Illumination by diffusion**: Illumination of an area beneath and to the flanks of a slightly elevated searchlight or of pyrotechnic illuminants, by the light scattered

- from atmospheric particles. **b. Illumination by reflection**: Illumination of an area by reflecting light from low cloud. Either or both of these effects are present when a searchlight is used in defilade or with its beam spread to maximum width.
- individual protection 1. Actions taken by individual soldiers to survive and continue the mission under nuclear, biological, chemical (NBC) conditions. See FM 3-100 2. Actions taken by individual soldiers to protect themselves from the effects of direct and indirect fire. See FMs 5-103, 7-7, and 7-8.
- **induced radiation** (JP 1-02, NATO) Radiation produced as a result of exposure to radioactive materials, particularly the capture of neutrons. See FM 3-3-1.
- in extremis (JP 1-02) A situation of such exceptional urgency that immediate action must be taken to minimize imminent loss of life or catastrophic degradation of the political or military situation. See FM 100-20.
- infiltration (JP 1-02) 1. The movement through or into an area or territory occupied by either friendly or enemy troops or organizations. The movement is made, either by small groups or by individuals, at extended or irregular intervals. When used in connection with the enemy, it infers that contact is avoided. 2. In intelligence usage, placing an agent or other person in a target area in hostile territory. Usually involves crossing a frontier or other guarded line. Methods of infiltration are: black (clandestine); grey (through legal crossing point but under false documentation); white (legal). (Army) 1. A choice of maneuver that entails movement through or into an area occupied by an enemy or a friendly force by small groups or individuals at extended or irregular intervals in which contact with the enemy is avoided. 2. When used in conjunction with a tactical vehicular march, vehicles are dispatched individually or in small groups at irregular intervals to reduce density and prevent undue massing of vehicles. (See also choices of maneuver and exfiltration.) See FMs 7-7, 7-8, 7-10, 7-20, 7-30, 17-95, 31-20, 34-1, 71-100, 71-123, 100-5, and 100-15.
- **inflight report** (JP 1-02) The transmission from the airborne system of information obtained both at the target and *en route*.
- **informant** (JP 1-02) **1.** A person who, wittingly or unwittingly, provides information to an agent, a clandestine service, or the police. **2.** In reporting, a person who has provided specific information and is cited as a source. (See also human intelligence (HUMINT), military operations other than war (MOOTW), and support and stability operations (SASO).) See FMs 34-1 and 100-20.
- **information** (JP 1-02, NATO) **1.** Facts, data, or instructions in any medium or form. (DOD) **2.** The meaning that a human assigns to data by means of the known conventions used in their representation. See FMs 34-1 and 100-6.
- **information dominance** (Army) The degree of information superiority that allows the possessor to use information systems and capabilities to achieve an operational advantage in a conflict or to control the situation in stability and support operations, while denying those capabilities to the adversary. See FM 100-6.
- **information operations** (**IO**) Continuous military operations within the military information environment that enable, enhance, and protect the friendly force's ability to collect, process, and act on information to achieve an advantage across the full range of military operations. Information operations include interacting with the global information environment and exploiting or denying an adversary's information and decision capabilities. See FM 100-6.

- **information requirements (IR)** (JP 1-02, NATO) Those items of information regarding the enemy and his environment which need to be collected and processed in order to meet the intelligence requirements of a commander. (See also commander's critical information requirements (CCIR) and priority intelligence requirements (PIR).) See FMs 34-1, 34-10, 34-130, and 101-5.
- **information systems** (Army) The entire infrastructure, organization, personnel, and components that collect, process, store, transmit, display, disseminate, and act on information. See FM 100-6.
- **information systems security (ISS)** The protection of information systems against unauthorized access to or modification of information, whether in storage, processing, or transit, and against denial of service to authorized users or the providing of access to unauthorized users, including those measures necessary to detect, document, and counter such threats. See FM 100-6.
- **information warfare (IW)** (Army) Actions taken to achieve information superiority by affecting a hostile's information, information-based processes, and information systems, while defending one's own information, information-based processes, and information systems. See FM 100-6.
- infosphere (Army) The rapidly growing global network of military and commercial command, control, communications, and computer systems and networks linking information databases and fusion centers that are accessible to the warrior anywhere, anytime, and during the performance of any mission. The infosphere provides the worldwide automated information exchange backbone that provides support to forces and provides seamless operations from anywhere to anywhere. The network of databases and fusion centers is secure, and its complexity is transparent to the warrior user. This emerging capability is highly flexible and can support the adaptive command and control infrastructures of the twenty-first century. See FM 100-6.
- infrastructure (JP 1-02, NATO) A term generally applicable to all fixed and permanent installations, fabrications, or facilities for the support and control of military forces. (Army) 1. The basic, underlying framework or features of a thing.
 2. In economics, basic resources, communications, industries, and so forth, upon which others depend.
 3. In insurgency, the organization (usually hidden) of insurgent leadership. See FMs 100-5 and 100-20.
- initial nuclear effects Effects that occur within the first minute and includes initial nuclear radiation, blast, thermal, and electromagnetic pulse. See FMs 3-3-1, 100-30, JPs 3-12.2, and 3-12.3.
- initial point (IP) (JP 1-02) 1. The first point at which a moving target is located on a plotting board.
 2. A well-defined point, easily distinguishable visually and/or electronically, used as a starting point for the bomb run to the target. See FM 6-20 series.
 3. Airborne—a point close to the landing area where serials (troop carrier air formations) make final alterations in course to pass over individual drop or landing zones.
 See FMs 7-7, 7-10, 7-20, 7-30, 71-100-2, and 90-26.
 4. Helicopter—an air control point in the vicinity of the landing zone from which individual flights of helicopters are directed to their prescribed landing sites.
 5. Any designated place at which a column or element thereof is formed by the successive arrival of its various subdivisions, and comes under the control of the commander ordering the move. See FMs 1-111 and 100-103.
- **initial response force** (JP 1-02) The first unit, usually military police, on the scene of a terrorist incident. (See also antiterrorism (AT).) See FM 19-1.
- **initiative** (Army) The ability to set or change the terms of battle; implies an offensive spirit.

- **injury** (JP 1-02) A term comprising such conditions as fractures, wounds, sprains, strains, dislocations, concussions, and compressions. In addition, it includes conditions resulting from extremes of temperature or prolonged exposure. Acute poisonings, except those due to contaminated food, resulting from exposure to a toxic or poisonous substance are also classed as injuries.
- insertion (Army) 1. Placement of troops and equipment into an operational area in air assault operations.
 2. The placement of observation posts, patrols, or raiding parties either by helicopter or parachute. (See also air assault.) See FMs 1-111, 71-100-3, and 90-4.
- **in-stride breach** A type of breaching used by maneuver units to quickly overcome unexpected or lightly defended tactical obstacles. Maneuver battalions and companies are task-organized with the assets necessary to conduct independent breaching operations. These include mine rollers, mine plows, engineers, priority of artillery, mortars, close air support, air defense, smoke targets, and smoke generators. (See also breach and deliberate breach.) See FM 90-13-1.
- **insurgency** (JP 1-02, NATO) An organized movement aimed at the overthrow of a constituted government through the use of subversion and armed conflict. (See also counterinsurgency.) See FMs 90-8 and 100-20.
- integrated combat airspace command and control (ICAC²) A system capable of linking and coordinating the airspace use and restrictions of all Services and a host nation, which may include aircraft, air defense, rocket artillery, unmanned aerial vehicles, and other high trajectory weapon systems, in order to maximize the accommodation of mission requirements. (See also Army airspace command and control (A²C²).) See FM 100-103-1.
- **integrated warfare** (JP 1-02) The conduct of military operations in any combat environment wherein opposing forces employ nonconventional weapons in combination with conventional weapons. See FM 3-100.
- intelligence (JP 1-02) 1. The product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas. 2. Information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding. (See also combat intelligence and imagery intelligence (IMINT).) See FMs 34-1, 34-10, and 34-40.
- intelligence collection plan (JP 1-02) A plan for gathering information from all available sources to meet an intelligence requirement. Specifically, a logical plan for transforming the essential elements of information into orders or requests to sources within a required time limit. (See also commander's critical information requirements (CCIR), intelligence cycle, and reconnaissance and surveillance plan.) See FMs 34-1, 34-10, 34-10-2, 34-130, and 101-5.
- intelligence cycle (JP 1-02) The steps by which information is converted into intelligence and made available to users. There are five steps in the cycle: a. planning and direction Determination of intelligence requirements, preparation of a collection plan, issuance of orders and requests to inormation collection agencies, and a continuous check on the productivity of collection agencies. b. collection Acquisition of information and the provision of this information to processing and/or production elements.
 c. processing Conversion of collected information into a form suitable to the production of intelligence.
 d. production Conversion of information into intelligence through the integration, analysis, evaluation, and interpretation of all source data and the preparation of intelligence products in support of known or anticipated user requirements.
 e. dissemination Conveyance of intelligence to users in a suitable form. (See also intelligence and intelligence collection plan.) See FM 34-1.

- intelligence preparation of the battlefield (IPB) A systematic approach to analyzing the enemy, weather, and terrain in a specific geographic area. It integrates enemy doctrine with the weather and terrain as they relate to the mission and the specific battlefield environment. This is done to determine and evaluate enemy capabilities, vulnerabilities, and probable courses of action. See FMs 34-130 and 101-5.
- intelligence preparation of the battlespace (JP 1-02) An analytical methodology employed to reduce uncertainties concerning the enemy, environment, and terrain for all types of operations. Intelligence preparation of the battlespace builds an extensive data base for each potential area in which a unit may be required to operate. The data base is then analyzed in detail to determine the impact of the enemy, environment, and terrain on operations and presents it in graphic form. Intelligence preparation of the battlespace is a continuing process.
- **intelligence synchronization matrix** A graphic representation that ties the collection plan to an operation and the commander's intelligence needs.
- **interagency** Activities or operations conducted by or through coordination with two or more agencies or an agency and one or more services of the same nation.
- **interagency operations** Any action which combines the human and material resources of two or more independent organizations, be they governmental, international, or private, in prosecution of a common objective. See FM 100-5.
- interdict Using fire support or maneuver forces; **1.** To seal off an area by any means; to deny use of a route or approach. **2.** A tactical task which is oriented on the enemy to prevent, hinder, or delay the use of an area or route by enemy forces. See FMs 1-111, 1-112, 7-30, 17-95, 71-100, 71-123, and 100-15.
- **interdiction** (JP 1-02) An action to divert, disrupt, delay, or destroy the enemy's surface military potential before it can be used effectively against friendly forces. See FMs 1-111, 1-112, 7-30, 17-95, 71-100, 71-123, and 100-15.
- **interdiction fire** (NATO) Fire placed on an area or point to prevent the enemy from using the area or point. (See also interdict and interdiction.) See FMs 6-series and 7-90.
- intermediate staging base (ISB) A logistics base established to provide support to deploying units *en route* to an operation; area established to ensure continuity of support. The use of an ISB allows supported tactical and operational commanders time to gather additional intelligence on the area of operations and finalize plans following briefings and rehearsals, and provides time during which units may redistribute and finalize their accompanying loads. See FM 100-15.
- internal defense and development (IDAD) (JP 1-02) The full range of measures taken by a nation to promote its growth and to protect itself from subversion, lawlessness, and insurgency. It focuses on building viable institutions (political, economic, social, and military) that respond to the needs of society. (See also foreign internal defense (FID).) See FMs 100-20 and 100-25.
- **internal security** (JP 1-02) The state of law and order prevailing within a nation. (See also internal defense and development (IDAD) and foreign internal defense (FID).) See FMs 100-20 and 100-25.
- **interned** (JP 1-02) A casualty definitely known to have been taken into custody of a nonbelligerent foreign power as the result of and for reasons arising out of any armed conflict in which the Armed Forces

- of the United States are engaged. (Army) 1. Battle casualties taken into custody by a nonbelligerent foreign power as a result of any armed conflict. 2. Anyone taken and kept as a prisoner of war.
- interoperability (JP 1-02, NATO) 1. The ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces and to use the services so exchanged to enable them to operate effectively together. (DOD) 2. The condition achieved among communications-electronics systems or items of communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users. The degree of interoperability should be defined when referring to specific cases. See FMs 100-5 and 100-6.
- intervisibility (IV) The condition of being able to see one point from another. This condition may be altered or interrupted by weather, smoke, terrain masking, dust, or debris. (See also concealment and cover.) See FM 34-130.
- **intervisibility line** A ridge or horizon beyond which equipment or personnel can be hidden from observation. (See FM 34-130.)
- **in-transit visibility** (Army) The capability to identify the location of resources at any moment in the distribution pipeline. See FMs 10-1 and 55-2.
- **intrusion** (JP 1-02) The intentional insertion of electromagnetic energy into transmission paths in any manner, with the objective of deceiving operators or of causing confusion. (See also electronic warfare (EW); jamming; and meaconing, intrusion, jamming, and interference (MIJI) report.) See FMs 34-1, 34-40, and 100-6.
- inversion An increase of air temperature with increase in altitude (the ground being colder than the surrounding air). When an inversion exists, there are no convection currents and wind speeds are below 5 knots. The atmosphere is stable and normally is considered the most favorable state for ground release of chemical agents. (See also haze, lapse, and neutral.) See FM 3-6.
- **irregular forces** (JP 1-02) Armed individuals or groups who are not members of the regular armed forces, police, or other internal security forces. See FMs 100-20 and 100-25.
- **irregular outer edge** (JP 1-02, NATO) In land mine warfare, short mine rows or strips laid in an irregular manner in front of a minefield facing the enemy to deceive the enemy as to the type or extent of the minefield. Generally, the irregular outer edge will only be used in minefields with buried mines.
- **isolate** A tactical task given to a unit to seal off (both physically and psychologically) an enemy from his sources of support, to deny an enemy freedom of movement, and prevent an enemy unit from having contact with other enemy forces. An enemy must not be allowed sanctuary within his present position. (See also encirclement.) See FMs 7-7, 7-8, 17-95, and 71-123.

J

jamming — The deliberate radiation, reradiation, or reflection of electromagnetic energy to prevent or degrade the receipt of information by a receiver. It includes communications and noncommunications jamming. (See also barrage jamming, command and control warfare (C²W), electromagnetic interference (EMI), electronic attack (EA), electronic warfare (EW), imitative electronic deception (IED), intrusion, and meaconing.) See FMs 34-1, 34-40, and 100-6.

- **joint air attack team (JAAT)** (Army) A combination of US Army attack and scout aircraft and fixed-wing close air support (CAS) aircraft operating together to locate and attack high-priority lucrative targets such as tanks and other targets of opportunity. JAAT normally operates in a coordinated effort with fire support, air defense artillery, and ground maneuver forces against enemy armored formations, command vehicles, and enemy air defense weapon systems. See FMs 1-112 and 6-20 series.
- **joint civil affairs task force (JCATF)** (Army) A joint task force composed of civil affairs units from more than one service, formed to carry out a specific civil affairs operation or prosecute civil affairs in support of a theater campaign or other operations. The JCATF may have conventional noncivil affairs units assigned or attached to support the conduct of specific missions.
- **joint force** (JP 1-02) A general term applied to a force composed of significant elements, assigned or attached, of two or more Military Departments, operating under a single joint force commander. See FMs 100-5, 100-15, 100-20, and JP 0-2.
- **joint force air component commander (JFACC)** (JP 1-02) The joint force air component commander derives authority from the joint force commander who has the authority to exercise operational control, assign missions, direct coordination among subordinate commanders, redirect and organize forces to ensure unity of effort in the accomplishment of the overall mission. The joint force commander will normally designate a joint force air component commander. The joint force air component commander's responsibilities will be assigned by the joint force commander (normally these would include, but not be limited to, planning, coordination, allocation, and tasking based on the joint force commander's apportionment decision). Using the joint force commander's guidance and authority, and in coordination with other Service component commanders and other assigned or supporting commanders, the joint force air component commander will recommend to the joint force commander apportionment of air sorties to various missions or geographic areas. (See also joint force commander (JFC).) See FMs 71-100 and 100-15.
- **joint force commander (JFC)** (JP 1-02) A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. See FMs 71-100, 100-15, 100-20, and JP 0-2.
- **joint force land component commander (JFLCC)** (JP 1-02) The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of land forces, planning and coordinating land operations, or accomplishing such operational missions as may be assigned. The joint force land component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The joint force land component commander will normally be the commander with the preponderance of land forces and the requisite command and control capabilities. (See also land component commander (LCC).) See FMs 100-5, 100-15, 100-20, and 100-30.
- **joint force maritime component commander (JFMCC)** (JP 1-02) The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of maritime forces and assets, planning and coordinating maritime operations, or accomplishing such operational missions as may be assigned. The joint force maritime component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The joint force maritime component commander will normally be the commander with the preponderance of maritime forces and the requisite command and control capabilities.

- **joint force special operations component commander (JFSOCC)** (JP 1-02) The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of special operations forces and assets, planning and coordinating special operations, or accomplishing such operational missions as may be assigned. The joint force special operations component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The joint force special operations component commander will normally be the commander with the preponderance of special operations forces and the requisite command and control capabilities.
- Joint Operation Planning and Execution System (JOPES) (JP 1-02) A continuously evolving system that is being developed through the integration and enhancement of earlier planning and execution systems: Joint Operation Planning System and Joint Deployment System. It provides the foundation for conventional command and control by national- and theater-level commanders and their staffs. It is designed to satisfy their information needs in the conduct of joint planning and operations. Joint Operation Planning and Execution System (JOPES) includes joint operation planning policies, procedures, and reporting structures supported by communications and automated data processing systems. JOPES is used to monitor, plan, and execute mobilization, deployment, employment, and sustainment activities associated with joint operations. (See also joint operations.) See FM 101-5.
- **joint operations** (JP 1-02) A general term to describe military actions conducted by joint forces, or by Service forces in relationships (e.g., support, coordinating authority), which, of themselves, do not create joint forces. (Army) Operations carried on by two or more of the armed forces. See FMs 100-5, 100-15, 100-20, and JP 0-2.
- joint psychological operations task force (JPOTF) (Army) A joint task force composed of psychological operations units from more than one service, formed to carry out a specific psychological operation or to prosecute psychological operations in support of a theater campaign or other operations. This joint task force may have conventional nonpsychological operations units under operational control, assigned, or attached to support the conduct of specific missions. It is subordinate to the joint task force and has a coequal position with the joint special operations task force, Army, Marine, Navy, and Air Force forces commanders. See FMs 33-1, 100-15, and 100-20.
- **joint special operations air component commander (JSOACC)** (JP 1-02) —The commander within the joint force special operations command responsible for planning and executing joint special air operations and for coordinating and deconflicting such operations with conventional nonspecial operations air activities. The joint special operations air component commander normally will be the commander with the preponderance of assets and/or greatest ability to plan, coordinate, allocate, task, control, and support the assigned joint special operations aviation assets. The joint special operations air component commander may be directly subordinate to the joint force special operations component commander or to any nonspecial operations component or joint force commander as directed.
- **joint special operations area** (Army) That area of land, sea, and airspace assigned to a joint special operations command to conduct special operations. See FM 31-20.
- **joint special operations task force (JSOTF)** (JP 1-02) A joint task force composed of special operations units from more than one Service, formed to carry out a specific special operation or prosecute special operations in support of a theater campaign or other operations. The JSOTF may have conventional nonspecial operations units assigned or attached to support the conduct of specific missions. See FMs 71-100, 100-15, 100-20, and 100-25.

- **joint suppression of enemy air defenses (JSEAD)** (JP 1-02) A broad term that includes all suppression of enemy air defenses activities provided by one component of the joint force in support of another. (See also air defense suppression and suppression of enemy air defenses (SEAD).) See FMs 44-100 and 6-20 series.
- **joint task force** (**JTF**) (JP 1-02) A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing joint task force commander. See FMs 100-5, 100-15, 100-20, and JP 0-2. **A-2**
- **joint unconventional warfare task force (JUWTF)** (Army) A force composed of unconventional warfare forces of two or more services which is constituted by the Secretary of Defense or by the commander of a unified command, a specified command, or an existing joint task force. (See also joint special operations task force (JSOTF) and joint psychological operations task force (JPOTF).) See FMs 100-5, 100-20, and 100-25.

K

- **key terrain** (JP 1-02, NATO) Any locality, or area, the seizure or retention of which affords a marked advantage to either combatant. (See also intelligence preparation of the battlefield (IPB).) See FM 34-130.
- **killed in action (KIA)** (JP 1-02) A casualty category applicable to a hostile casualty, other than the victim of a terrorist activity, who is killed outright or who dies as a result of wounds or other injuries before reaching a medical treatment facility. (See also casualty, died of wounds (DOW), hostile casualty, nonhostile casualty, and graves registration.) See FMs 8-10, 8-55, 10-63-1, 12-6, and 16-1.

L

- **land component commander (LCC)** (Army) The senior commander of a joint or multinational military force responsible for all aspects of operations for land maneuver and support forces. (See also joint force land component commander (JFLCC).) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- landing area (JP 1-02) 1. The part of the objective area within which are conducted the landing operations of an amphibious force. It includes the beach, the approaches to the beach, the transport areas, the fire support areas, the air occupied by close supporting aircraft, and the land included in the advance inland to the initial objective. 2. (Airborne) The general area used for landing troops and materiel either by airdrop or air landing. This area includes one or more drop zones or landing strips. 3. Any specially prepared or selected surface of land, water, or deck designated or used for takeoff and landing of aircraft. (See also airhead, drop zone (DZ), landing zone (LZ) and objective.) See FMs 1-111, 7-8, 7-10, 7-20, 7-30, 31-12, 71-100-2, 71-100-3, 90-4, and 90-26.
- **landing beach** (JP 1-02, NATO) That portion of a shoreline usually required for the landing of a battalion landing team. However, it may also be that portion of a shoreline constituting a tactical locality (such as the shore of a bay) over which a force larger or smaller than a battalion landing team may be landed. (See also amphibious operation.) See FMs 31-12 and 71-100-2.
- landing plan (JP 1-02) In amphibious operations, a collective term referring to all individually prepared naval and landing force documents that, taken together, present in detail all instructions for execution of the ship-to-shore movement. (Army) An airborne, air assault, or air movement plan prescribing the sequence, place of arrival, and method of entry into the objective area. The purpose of the plan is to get the correct units to the correct place in the correct order to properly execute the ground tactical plan. (See also ground

- tactical plan and marshalling plan.) See FMs 1-111, 7-8, 7-10, 7-20, 7-30, 31-12, 71-100-2, 71-100-3, 90-4, and 90-26.
- **landing point** (JP 1-02, NATO) A point within a landing site where one helicopter or vertical takeoff and landing aircraft can land. (See also air assault, landing site, and landing zone (LZ).) See FMs 1-111, 7-8, 7-10, 7-20, 7-30, 71-100-2, 71-100-3, 90-4, and 90-26.
- **landing site** (JP 1-02, NATO) **1.** A site within a landing zone containing one or more landing points. **2.** In amphibious operations, a continuous segment of coastline over which troops, equipment, and supplies can be landed by surface means. (Army) A location where aircraft take off and land. See FM 71-100-2.
- landing zone (LZ) (JP 1-02, NATO) Any specified zone used for the landing of aircraft. (See also air assault and airhead.) See FMs 1-111, 7-8, 7-10, 7-20, 7-30, 31-12, 71-100-2, 71-100-3, 90-4, and 90-26.
- **landing zone control party** (JP 1-02, NATO) Personnel specially trained and equipped to establish and operate communications devices from the ground for traffic control of aircraft/helicopters for a specific landing zone. (See also air assault.) See FMs 1-111, 7-8, 7-10, 7-20, 7-30, 71-100-2, 71-100-3, and 90-4.
- lane A route through an enemy or friendly obstacle that provides a passing force safe passage. The route may be reduced and proofed as part of a breach operation, or constructed as part of a friendly obstacle. It is a clear route that moves all the way through an obstacle. (See also gap.) See FMs 5-71-100, 5-101, 5-102, and 90-13-1.
- lane marker (JP 1-02, NATO) In land mine warfare, sign used to mark a minefield lane. Lane markers, at the entrance to and exit from the lane may be referenced to a landmark or intermediate marker. (See also breach, gap, and lane.) See FMs 5-71-100, 5-101, 5-102, 90-13-1.
- **lapse** A marked decrease in air temperature with increasing altitude because the ground is warmer than the surrounding air. This condition usually occurs between 1100 and 1600 hours, local time, when skies are clear. Strong convection currents exist during lapse conditions. For chemical operations, the state is defined as unstable and is normally considered the most unfavorable for the release of chemical agents. (See also inversion and neutral.) See FM 3-6.

large-scale map — See map.

- **latent** (nuclear) ineffectiveness 1. The minimum exposure that will result in the average service member becoming performance-degraded within three hours and remaining so until death. 2. The minimum exposure that will result in the average service member becoming combat ineffective at any time within six weeks of postexposure. See FMs 8-10-7, 100-30, JPs 3-12.2, and 3-12.3.
- lateral boundaries Control measures that define the left and right limits of a unit's zone of action or sector. Together with the rear and forward boundaries and a coordinating altitude, lateral boundaries define the area of operations for a commander. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- **lateral route** (JP 1-02, NATO) A route generally parallel to the forward edge of the battle area, which crosses, or feeds into, axial routes. (See also main supply route (MSR), alternate supply route (ASR), and air corridor.) See FMs 1-111, 10-1, 63-2, 63-2-1, 63-6, 63-20, 63-21, and 71-100-3.

- **lateral spread** (JP 1-02) A technique used to place the mean point of impact of two or more units 100 meters apart on a line perpendicular to the gun-target line. See FM 6-40.
- **latest time information is of value** The time by which an intelligence organization or staff must deliver information to the requestor in order to provide decision makers with timely intelligence. This must include the time anticipated for processing and disseminating that information as well as for making the decision. See FMs 34-1 and 34-130.
- **law and order operations** A military police mission that includes law enforcement, criminal investigation, and the confinement of US military prisoners. Law and order operations are conducted only when the combat commander requires it and when battle intensity permits. See FM 19-10.
- **law of war** (JP 1-02) That part of international law that regulates the conduct of armed hostilities. Also called the law of armed conflict. (See also rules of engagement (ROE) and rules of interaction (ROI).) See FM 27-10.
- lay (JP 1-02) 1. Direct or adjust the aim of a weapon. 2. Setting of a weapon for a given range, or for a given direction, or both. 3. To drop one or more aerial bombs or aerial mines onto the surface from an aircraft. 4. To spread a smoke screen on the ground from an aircraft. 5. To calculate or project a course.
 6. To lay on: a. to execute a bomber strike; b. to set up a mission. See FMs 6-series and 7-90.
- **least separation distance (LSD)** The minimum distance that a desired ground zero must be separated from an object to ensure no more than a 10 percent chance of damage with a 99 percent assurance. It is the sum of the radius of preclusion and the buffer distance. See FM 100-30.
- **lewisite** A blister agent (an arsenical vesicant) used as a moderately delayed-action casualty agent with a persistency somewhat shorter than HD (distilled mustard). It produces effects similar to mustard, although, unlike mustard, it produces immediate pain. See FM 3-9.
- **liaison** (NATO) That contact or intercommunication maintained between elements of military forces to ensure mutual understanding and unity of purpose and action. See FM 101-5.
- **liberated territory** (JP 1-02, NATO) Any area, domestic, neutral, or friendly, which, having been occupied by an enemy, is retaken by friendly forces.
- **lift** All helicopters assigned to a particular mission to move troops, supplies, and equipment. (See also chalk and air assault.) See FMs 1-111, 7-8, 7-10, 7-20, 7-30, 71-100-2, 71-100-3 and 90-4.
- **lift fire** In direct fire, the command to raise the cone of fire so that the beaten zone strikes the target, but the space between the target and the firing weapons is safe for maneuver by friendly forces. See FMs 17-12 and 23-1.
- **light line (LL)** (JP 1-02, NATO) A designated line forward of which vehicles are required to use black-out lights at night. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-123, 71-100, 100-15, and 101-5. **3-26**
- **limit of advance (LOA)** An easily recognized terrain feature beyond which attacking elements will not advance. (See also probable line of deployment (PLD) and final coordination line (FCL).) See FMs 1-112, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, and 71-123. 3-17

- **limitation** 1. Control measure, instruction, or order that restricts freedom of action. 2. An action, activity, or task that a unit is not capable of executing. This condition may be due to natural reasons such as terrain and weather or reasons such as training or equipment.
- **limited access route** (JP 1-02, NATO) A one way route with one or more restrictions which preclude its use by the full range of military traffic. (See also main supply route (MSR) and alternate supply route (ASR).) See FM 55-2.
- **limited visibility operations** Operations conducted at night and during other periods of reduced visibility. (See also limit of advance (LOA), probable line of deployment (PLD), and final coordination line (FCL).) See FMs 1-112, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, and 71-123.
- **limit of fire** (JP1-02, NATO) **1.** The boundary marking off the area on which gunfire can be delivered. **2.** Safe angular limits for firing at aerial targets. (Army) Tactical markers used to define the sector of fire for an individual soldier, a weapon system, or a unit that prevents fratricide of adjacent units and focuses fires to kill the enemy. (See also final protective line (FPL), target reference point (TRP), and engagement area (EA).) See FMs 1-112, 7-7, 7-8, 7-10, 7-20, 17-15, and 71-123.
- **line** (JP 1-02, NATO) In artillery and naval gunfire support, a spotting, or an observation, used by a spotter or an observer to indicate that a burst(s) occurred on the spotting line. (Army) Pertains to mortar fires also. See FMs 6-series and 7-90.
- **line of contact (LC)** A general trace delineating the location where two opposing forces are engaged. (See also forward edge of the battle area (FEBA), forward line of own troops (FLOT), line of departure (LD), and line of departure is line of contact (LD/LC).) See FMs 1-112, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, and 71-123. 3-13
- **line of demarcation (LOD)** A line defining the boundary of a buffer zone or an area of limitation. A line of demarcation may also be used to define the forward limits of disputing or belligerent forces after each phase of disengagement or withdrawal has been completed.
- **line of departure (LD)** (JP 1-02, NATO) **1.** In land warfare, a line designated to coordinate the departure of attack elements. **2.** In amphibious warfare, a suitably marked offshore coordinating line to assist assault craft to land on designated beaches at scheduled times. (See also line of contact (LC) and line of departure is line of contact (LD/LC).) See FMs 1-111, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, 31-12, and 71-123. **3-17**
- line of departure is line of contact (LD/LC) The designation of forward friendly positions as the LD when opposing forces are in contact. (See also line of contact (LC) and line of departure (LD).) See FMs 1-111, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, and 71-123.
- **line formation** An arrangement of vehicles or personnel in which elements are arranged abreast of each other. This formation permits maximum fire to front or rear and a minimum of fire to the flanks. (See also formation, movement formation, echelon formation, and column formation.) See FMs 1-112, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, and 71-123.
- **line haul** In highway transportation, a type of haul involving long trips over the road in which the portion of driving time is high in relation to the time consumed in loading and unloading. Line haul usually involves one trip or a portion of a trip per operating shift of 10 hours, or 2 trips per day. See FMs 55-2 and 55-10.

- **lines of communications** (LOC) (JP 1-02) All the routes, land, water, and air, which connect an operating military force with a base of operations and along which supplies and military forces move. (See also communications zone (COMMZ).) See FMs 10-1, 100-5, 100-7, 100-10, and 100-15.
- line of sight (LOS) The unobstructed path from a soldier, weapon, weapon sight, electronic-sending and -receiving antennas, or piece of reconnaissance equipment from one point to another. (See also intervisibility (IV).) See FMs 1-111, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, 71-100, 71-123, 100-15, and 100-20.
- **linkup** A meeting of friendly ground forces (such as when an advancing force reaches an objective area previously seized by an airborne or air assault force, when an encircled element breaks out to rejoin friendly forces, or when converging maneuver forces meet). (See also linkup point.) See FMs 1-111, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, 71-100, 71-123, 100-15, and 100-20.
- **linkup point** An easily identifiable point on the ground where two forces conduct a linkup meet. When one force is stationary, linkup points normally are established where the moving force's routes of advance intersect the stationary force's security elements. Linkup points for two moving forces are established on boundaries where the two forces are expected to converge. (See also air assault, airborne operation, breakout, and linkup.) See FMs 1-111, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, 31-20, 71-100, 71-100-3, 71-123, 90-4, 90-26, 100-15, and 100-20.
- **list of targets** (JP 1-02) A tabulation of confirmed or suspect targets maintained by any echelon for informational and fire support planning purposes. (See also fire plan and target list.) See FMs 6-20 series and 101-5.
- **load plan** A document which presents in detail all instructions for the arrangement of personnel and equipment aboard a given type aircraft or vehicle. (See also combat loading.) See FMs 7-8, 55-12, and 71-10.
- **local haul** In highway transportation, a type of haul characterized by short driving time in relation to loading and unloading time and normally involves four or more trips per day. See FMs 55-2 and 55-10.
- **local security** Those security elements established near a unit to prevent surprise by the enemy. See FMs 1-111, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, 71-100, 71-123, 100-15, and 100-20.
- **lock on** (JP 1-02, NATO) Signifies that a tracking or target-seeking system is continuously and automatically tracking a target in one or more coordinates (e.g., range, bearing, elevation).
- **lodgment area** (JP 1-02) *See* airhead; beachhead. (Army) A designated area or hostile or potentially hostile territory that, when seized and held, ensures the continuous landing (buildup) of troops and materiel and provides sufficient maneuver space for buildup of combat power to resolve the crises rapidly and decisively. (See also airhead, beachhead, and opposed entry.) See FMs 1-111, 7-7, 7-8, 7-10, 7-20, 7-30, 17-15, 17-95, 71-100, 71-100-2, 71-100-3, 71-123, 100-15, and 100-20.
- **log crib** A type of point obstacle used as a roadblock where such an obstacle cannot be readily bypassed. (See also abatis, point obstacle, road block, and cratering charge.) See FMs 5-34, 5-71-100, and 5-102.
- **log hurdle** A type of point obstacle used to slow tracked vehicles and make them more vulnerable to antitank fires or make the tracked vehicles vulnerable to "belly shots" as they climb over the hurdles. (See also abatis, point obstacle, road block, and cratering charge.) See FMs 5-34, 5-71-100, and 5-102.

- **logistics** (JP 1-02, NATO) The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, those aspects of military operations which deal with: **a.** design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; **b.** movement, evacuation, and hospitalization of personnel; **c.** acquisition or construction, maintenance, operation, and disposition of facilities; and **d.** acquisition or furnishing of services. (See also combat service support (CSS).) See FMs 10-1 and 100-10.
- **logistics assault base (LAB)** (Army) A temporary logistics support area transported across enemy lines via helicopter to support extended deep air assault operations and raids. If the LAB is to become a permanent facilitity, the unit must develop it into a forward operations base. See FM 71-100-3.
- **logistics base** A principal or supplementary base of support; a locality containing installations which provide logistic or support.
- **logistics package** (**LOGPAC**) A grouping of multiple classes of supplies and supply vehicles under the control of a single convoy commander. Daily LOGPACs contain a standardized allocation of supplies. Special LOGPACs can also be dispatched as needed. See FM 71-123.
- **logistics preparation of the battlefield** (Army) All actions taken by combat service support to maximize the means of supporting commander's plans.
- **logistics over the shore (LOTS)** The loading and unloading of ships without the benefit of fixed port facilities, in friendly or undefended territory, and, in time of war, during phases of theater development in which there is no enemy opposition.
- **logistics release point (LRP) 1.** The point along the supply route where the unit first sergeant or unit guide takes control of a company logistics package (LOGPAC). **2.** The point along the supply route where the supported unit meets the supporting unit to transfer supplies. See FM 55-30. **3-38**
- **log posts** A type of point obstacle with posts placed in belts and combined with wire and usually used as a road block or turning obstacle. To breach a belt of log posts requires an extensive breaching effort. (See also abatis, cratering charge, point obstacle, and road block.) See FMs 5-34, 5-71-100, and 5-102.
- **long-range surveillance (LRS)** Surveillance of an enemy force or a specified area over extended distances using long-range surveillance units; special operations forces; division, corps, theater, or national monitoring devices; or any combination of these to provide information to the commander.
- **lost** (JP 1-02, NATO) In artillery and naval gunfire support, a spotting, or an observation used by a spotter or an observer to indicate that rounds fired by a gun or mortar were not observed. (Army)—Pertains to mortar and direct fire gunnery also. See FM 6-series, 7-90, 7-91, 17-12, and 23-1.
- **low-altitude parachute extraction system (LAPES)** (Army) A low-level, self-contained extraction system capable of delivering heavy equipment or supplies via aircraft to a specified extraction zone (EZ) from an altitude of 5 to 10 feet above ground level when air landing is not feasible. See FMs 7-7, 7-10, 7-20, 7-30, 71-100-2, and 90-26.
- **low-level transit route (LLTR)** (JP 1-02, NATO) A temporary corridor of defined dimensions established in the forward area to minimize the risk to friendly aircraft from friendly air defenses or surface forces. (See also minimum-risk route (MRR), air corridor, and flight corridor.) See FM 100-103.

M

- magnetic azimuth An angle of direction measured clockwise from magnetic north. (See also azimuth, grid of azimuth, and true azimuth.) See FM 21-26.
- magnetic declination (JP 1-02, NATO) The angle between the magnetic and geographical meridians at any place, expressed in degrees east or west to indicate the direction of magnetic north from true north. In nautical and aeronautical navigation, the term magnetic variation is used instead of magnetic declination and the angle is termed variation of the compass or magnetic variation. Magnetic declination is not otherwise synonymous with magnetic variation which refers to regular or irregular change with time of the magnetic declination, dip, or intensity. See FM 21-26.
- magnetic variation (JP 1-02, NATO) 1. In navigation, at a given place and time, the horizontal angle between the true north and magnetic north measured east or west according to whether magnetic north lies east or west of true north. (See also magnetic declination.) 2. In cartography, the annual change in direction of the horizontal component of the Earth's magnetic field. See FM 21-26.
- main attack (JP 1-02, NATO) The principal attack or effort into which the commander throws the full weight of the offensive power at his disposal. An attack directed against the chief objective of the campaign or battle. (Army) The primary mission in support of the higher commander's main effort. It is weighted with combat, combat support, and combat service support. The higher commander will normally support the main attack with a supporting attack(s) and other operations such as deep attacks, electronic warfare (EW) operations, deception operations, and economy of force operations. (See also main effort, supporting attack, deception operation, and attack.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.

 3-15, 3-16
- main battle area (MBA) (JP 1-02) That portion of the battlefield in which the decisive battle is fought to defeat the enemy. For any particular command, the main battle area extends rearward from the forward edge of the battle area to the rear boundary of the command's subordinate units. (See also defensive operations, forward edge of the battle area (FEBA), and handover line.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- main body 1. The principal part of a tactical command or formation. It does not include detached elements of the command such as advance guards, flank guards, and covering forces. 2. In a motor column, all vehicles exclusive of the column head, trail, and control vehicles which consist primarily of the vehicles carrying the bulk of the cargo or troops within the column. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- main command post A cell that includes those staff activities involved in controlling and sustaining current operations and in planning future operations. The main command post (CP) normally operates under control of the chief of staff. In addition to the chief of staff, the main CP consists of G1, G2, G3, and G4 elements; fire support and chemical elements, tactical air control party element, and an Army airspace command and control element consisting of air defense artillery and Army aviation staff elements. The main CP exercises command and control of the current operation in cases where a tactical CP is not employed. (See also command post (CP); rear command post; tactical command post (TAC CP).) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- main effort (Army) The unit, battle position, sector, zone, axis, avenue of approach, area of operations, theater of operations, and so forth, the senior commander has determined has the most important task and

purpose at that time, whose success will make the most difference in the accomplishment of the higher commander's overall mission or objective. Commanders at all levels should designate a point of main effort along with supporting efforts. This helps them and their staffs to allocate resources accordingly, providing focus to the operation while setting priorities and determining risks, promoting unity of effort, and facilitating and understanding of the commander's intent. There is only one main effort at any time in the operation, although the main effort may change as the situation changes to take advantage of opportunities or to avert failure. In the offense, the commander will conduct the main attack where the main effort has been designated. The unit(s) conducting the main attack normally will shift throughout the operation. The main attack may be a deep attacking unit, the point unit of the ground attack, or the reserve, when committed. In the defense, the main effort is that area along the enemy avenue of approach that the defense depends on for success. The higher commander will influence the main effort with supporting effort(s). For example, during World War II the European Theater was the national main effort and the Pacific theater was a supporting effort. (See also main attack and supporting effort.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, and 101-5.

- main line of resistance (JP 1-02) A line at the forward edge of the battle position, designated for the purpose of coordinating the fire of all units and supporting weapons, including air and naval gunfire. It defines the forward limits of a series of mutually supporting defensive areas, but it does not include the areas occupied or used by covering or screening forces.
- main operations base (MOB) (JP 1-02) In special operations, a base established by a joint force special operations component commander or a subordinate special operations component commander in friendly territory to provide sustained command and control, administration, and logistical support to special operations activities in designated areas. (See also advanced operations base (AOB) and forward operations base (FOB).) See FM 100-25.
- main supply route (MSR) (JP 1-02, NATO) The route or routes designated within an area of operations upon which the bulk of traffic flows in support of military operations.
- maintenance (materiel) (JP 1-02) 1. All action taken to retain materiel in a serviceable condition or to restore it to serviceability. It includes inspection, testing, servicing, classification as to serviceability, repair, rebuilding, and reclamation. 2. All supply and repair action taken to keep a force in condition to carry out its mission. 3. The routine recurring work required to keep a facility (plant, building, structure, ground facility, utility system, or other real property) in such condition that it may be continuously used, at its original or designed capacity and efficiency for its intended purpose.
- maintenance collection point (MCP) A point established to collect equipment awaiting repair, controlled exchange, cannibalization, or evacuation. It may be operated by the user or by direct support maintenance units. (See also unit maintenance collection point (UMCP).)
- maintenance status (JP 1-02) 1. A nonoperating condition, deliberately imposed, with adequate personnel to maintain and preserve installations, materiel, and facilities in such a condition that they may be readily restored to operable condition in a minimum time by the assignment of additional personnel and without extensive repair or overhaul. 2. That condition of materiel which is in fact, or is administratively classified as, unserviceable, pending completion of required servicing or repairs. (Army) A condition of materiel readiness that reports the level of operational readiness for a piece of equipment. See FM 63-2.
- **maintenance support team (MST)** A tailored direct support team that colocates with a unit maintenance element for a designated period. See FM 63-2.

- **major disaster** *See* domestic emergencies.
- **major operation** (Army) The coordinated actions of large forces in a single phase of a campaign. A major operation could contain a number of battles or could be a single critical battle.
- mandate A resolution approved by the United Nations Security Council or United States government that delineates the objective, the resources, role, and tasks of the force assigned to carry out the resolution. It also includes the terms of reference which should include the rules of engagement, rules of interaction, force protection, geographical limitations, limits on the duration of the operation, relationships with belligerent parties, relationships with humanitarian assistance organizations, personnel resources, and financing. (See also counterdrug (CD), counterinsurgency, humanitarian assistance (HA), peace operations, and stability and support operations (SASO). See FMs 100-20 and 100-23.
- maneuver (JP 1-02, NATO) 1. A movement to place ships or aircraft in a position of advantage over the enemy. 2. A tactical exercise carried out at sea, in the air, on the ground, or on a map in imitation of war.
 3. The operation of a ship, aircraft, or vehicle, to cause it to perform desired movements. 4. Employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect to the enemy in order to accomplish the mission. (Army) Employment of forces on the battlefield through movement of combat forces in relation to the enemy, supported by fire or fire potential from all sources, to gain potential advantage from which to destroy or threaten destruction of the enemy to accomplish the mission. See FMs 100-5 and 100-40.
- manifest (JP 1-02) A document specifying in detail the passengers or items carried for a specific destination.
- manipulative electromagnetic deception (MED) (JP 1-02) Actions to eliminate revealing, or convey misleading, electromagnetic telltale indicators that may be used by hostile forces. (See also electronic warfare (EW), electromagnetic deception, imitative electromagnetic deception, and simulative electromagnetic deception.) See FM 34-40.
- map (JP 1-02, NATO) A graphic representation, usually on a plane surface, and at an established scale, of natural or artificial features on the surface of a part or whole of the Earth or other planetary body. These features are positioned relative to a coordinate reference system. See FM 21-26. (Army) a. large-scale map. A map having a scale of 1:75,000 or larger used for tactical planning. b. medium-scale map. A map having a scale between 1:1,000,000 and 1:75,000 used for operational planning. c. small-scale map. A map having a scale smaller than 1:1,000,000 used for general planning and strategic studies.
- march column A group of two to five serials using the same route for a single movement, organized under a single commander for planning, regulating, and controlling. (See also march serial, march unit, and movement order.) See FMs 55-30 and 101-5.
- march serial A subdivision of a march column consisting of a group of two to five march units using the same route for a single movement, organized under a single commander for planning, regulating, and controlling. (See also march column, march unit, and movement order.) See FMs 55-30 and 101-5.
- march unit The smallest subdivision of a march column; a group of normally no more than 25 vehicles using the same route for a single movement, organized under a single commander for planning, regulating, and controlling. (See also march column, march serial, and movement order.) See FMs 55-30 and 101-5.
- Marine air-ground task force (MAGTF) (JP 1-02) A task organization of Marine forces (division, aircraft wing, and service support groups) under a single command and structured to accomplish a specific mission.

The MAGTF components will normally include command, aviation combat, ground combat, and combat service support elements (including Navy Support Elements). Three types of MAGTFs that can be task organized are the Marine expeditionary unit, Marine expeditionary brigade, and Marine expeditionary force. The four elements of a Marine air-ground task force are command element (CE), aviation combat element (ACE), ground combat element (GCE), and combat service support element (CSSE). (See also aviation combat element (ACE), combat service support element (CSSE), command element (CE), ground combat element (GCE), Marine expeditionary force (MEF), Marine expeditionary force (forward) (MEF (FWD)), Marine expeditionary unit (MEU), and task force.)

- Marine expeditionary force (MEF) (JP 1-02) The Marine expeditionary force, the largest of the Marine air-ground task forces, is normally built around a division/wing team, but can include several divisions and aircraft wings, together with an appropriate combat service support organization. The Marine expeditionary force is capable of conducting a wide range of amphibious assault operations and sustained operations ashore. It can be tailored for a wide variety of combat missions in any geographic environment. (See also Marine air-ground task force (MAGTF), Marine expeditionary force (forward) (MEF(FWD)), and Marine expeditionary unit (MEU).) See JP 3-02.1.
- Marine expeditionary force (forward) (MEF(FWD)) A task organization which is normally built around a regimental landing team, a provisional Marine aircraft group, and a logistics support group; a brigade-sized unit which has been designated as the forward echelon of a Marine Expeditionary Force (MEF). It can deploy as an air contingency force, a maritime or geographic prepositioning force, or the landing force of an amphibious operation. It normally can sustain operations for 30 days while the follow-on forces of the MEF are being deployed. (See also Marine air-ground task force (MAGTF), Marine expeditionary force (MEF), and Marine expeditionary unit (MEU).) See JP 3-02.1.
- Marine expeditionary unit (MEU) (JP 1-02) A task organization which is normally built around a battalion landing team, reinforced helicopter squadron, and logistic support unit. It fulfills routine forward afloat deployment requirements, provides an immediate reaction capability for crisis situations, and is capable of relatively limited combat operations. (See also Marine air-ground task force (MAGTF), Marine expeditionary force (MEF), and Marine expeditionary force (forward) (MEF (FWD)). See JP 3-02.1.
- **marking smoke** Smoke employed to relay prearranged communications on the battlefield. It is frequently used to identify targets, evacuation points, friendly perimeters, and so forth. See FM 3-50.
- marshalling (JP 1-02, NATO) 1. The process by which units participating in an amphibious or airborne operation group together or assemble when feasible or move to temporary camps in the vicinity of embarkation points, complete preparations for combat, or prepare for loading. 2. The process of assembling, holding, and organizing supplies and/or equipment, especially vehicles of transportation, for onward movement. (See also staging area.) See FMs 71-100-3 and 90-26.
- marshalling area 1. The general area in which unit preparation areas and departure airfields may be located and from which movement is initiated.
 2. An area located adjacent to strategic air and sea ports of embarkation and debarkation, controlled by the Army service component commander, in which units configure forces, sustainment, and material for onward movement to staging areas or tactical assembly areas.
 3. In amphibious operations, the designated area in which, as part of the mounting process, units are reorganized for embarkation; vehicles and equipment are prepared to move directly to embarkation areas; and housekeeping facilities are provided for troops by other units. See FM 100-17.
- marshalling plan An airborne operational plan by which units of the force complete final preparation for combat, move to departure airfields, and load for take-off. It begins when elements of the force are literally

- "sealed" in marshalling areas and terminates at loading. (See also ground tactical plan and landing plan.) See FMs 100-17 and 101-5.
- mask only 1. A protective measure that provides some relief from mission-oriented protective posture (MOPP) gear for personnel who must work in a vapor- or aerosol-contaminated environment. Personnel must be within protective shelters (certain types of vans, tanks, or buildings) where the danger of transfer hazards is minimal. This posture is only used when the only threat is vapor. Mask only cannot be used when blister agents are present.
 2. A protective measure preparation used when the commander anticipates that his only chemical threat is from riot control agents. (See also mission-oriented protective posture (MOPP).) See FM 3-4.
- mass (JP 1-02, NATO) 1. The concentration of combat power. 2. The military formation in which units are spaced at less than the normal distances and intervals. (Army) To concentrate or bring together fires, as to mass fires of multiple weapons or units. (See also principles of war.) See FM 100-5.
- mass casualty (JP 1-02) Any large number of casualties produced in a relatively short period of time, usually as the result of a single incident such as a military aircraft accident, hurricane, flood, earthquake, or armed attack that exceeds local logistical support capabilities. (See also casualty.)
- massed fire (JP 1-02) 1. The fire of the batteries of two or more ships directed against a single target.

 2. Fire from a number of weapons directed at a single point or small area. (See also concentrated fire.)
- materiel release confirmation (JP 1-02) A notification from a shipping/storage activity advising the originator of a materiel release order of the positive action taken on the order. It will also be used with appropriate shipment status document identifier codes as a reply to a follow-up initiated by the inventory control point.
- materiel release order (JP 1-02) An order issued by an accountable supply system manager (usually an inventory control point or accountable depot/stock point) directing a nonaccountable activity (usually a storage site or materiel drop point) within the same supply distribution complex to release and ship materiel.
- maximum effective range (JP 1-02, NATO) The maximum distance at which a weapon may be expected to be accurate and achieve the desired result. (Army) The distance from a weapon system at which a 50 percent probability of target hit is expected, or the tracer burnout range. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **maximum range** (JP 1-02, NATO) The greatest distance a weapon can fire without consideration of dispersion. (Army) The maximum distance a projectile or rocket can go at the optimum elevation of the weapon. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- maximum rate of fire The largest quantity of rounds physically or mechanically possible to fire through a weapon or weapon system in a specified period of time regardless of the damage that could be done to the system if this number of rounds was fired for a prolonged period of time. (See also sustained rate of fire.) See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **M-day** (JP 1-02) The term used to designate the unnamed day on which full mobilization commences or is due to commence.

- **meaconing** (JP 1-02, NATO) A system of receiving radio beacon signals and rebroadcasting them on the same frequency to confuse navigation. The meaconing stations cause inaccurate bearings to be obtained by aircraft or ground stations.
- meaconing, interference, jamming, and intrusion (MIJI) report A report to record and report interference experienced with communications which was not determined to be caused by locally generated spurious signals or technical difficulties. This report is prepared based on an interference report forwarded from the unit or element that initially experienced the interference. The unit-level interference report is transmitted by the fastest and most secure means available. See FM 34-40.
- medical care echelon Describes the five levels of treatment within the military system. Each echelon has the same capabilities as the echelon before it, but adds a new treatment capability that distinguishes it from the previous echelon. The five echelons are: Echelon I unit level or immediate lifesaving measures; Echelon II a medical unit that adds dental, laboratory, x-ray, and patient holding capability; Echelon III mobile army surgical hospitals and combat support hospitals that add the capability to perform surgery; Echelon IV general hospitals and field hospitals that add staffing and equipment for general and specialized medical and surgical treatment; Echelon V continental United States-based hospitals that can provide the most specialized and long-term care possible. See FMs 8-10, 8-10-1, 8-10-14, 8-10-14, 8-10-24, 8-51, and 8-55.
- **medical evacuation (MEDEVAC)** The timely and efficient movement of patients while providing *en route* medical care to and between medical treatment facilities. See FMs 8-10 and 8-10-6.
- **medical evacuees** (JP 1-02) Personnel who are wounded, injured, or ill and must be moved to or between medical facilities. See FMs 8-10, 8-10-1, 8-10-4, 8-10-14, 8-10-24.
- **medical threat** (Army) The composite of all ongoing or potential enemy actions and environmental conditions that reduce the performance effectiveness of the soldier. The soldier's reduced effectiveness results from sustained wounds, injuries, or diseases. See FMs 8-10, 8-10-8, 8-55.
- medical treatment facility (MTF) (JP 1-02) A facility established for the purpose of furnishing medical and/or dental care to eligible individuals. See FMs 8-10, 8-10-1, 8-10-4, 8-10-14, 8-10-24.
- **medical waste** Any waste that is generated in the diagnosis, treatment, or immunization of human beings or animals.
- **medium-scale map** See map.
- **meeting engagement** (JP 1-02, NATO) A combat action that occurs when a moving force, incompletely deployed for battle, engages an enemy at an unexpected time and place. (Army) The enemy force may be either stationary or moving. (See also movement to contact.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- military art (Army) The judgmental application of military science to the conditions at hand. Such judgment depends on knowledge in great depth which goes beyond a knowledge of mechanical factors and force ratios. It depends on inspired and skillful application of sound scientific approaches and demands the application of sound judgment in the weighting of the intangibles.

- military chemical compound Chemical substance that has become generally accepted by the public for use in conventional war. Included are riot control agents, flame and smoke materials, and military herbicides. Excluded are chemical agents. See FM 3-9.
- **military crest** An area on the forward or reverse slope of a hill or ridge just below the topographical crest from which maximum observation and direct fire covering the slope down to the base of the hill or ridge can be obtained. (See also topographical crest.) See FM 21-26.
- military grid reference system (JP 1-02, NATO) A system which uses a standard-scaled grid square, based on a point of origin on a map projection of the surface of the Earth in an accurate and consistent manner to permit either position referencing or the computation of direction and distance between grid positions. See FM 21-26.
- **military information environment (MIE)** Those individuals, organizations, and systems within the global information environment (GIE), both friendly and hostile, military and nonmilitary, that support, enable, or significantly influence a specific military operation. See FM 100-6.
- military load classification (MLC) (JP 1-02, NATO) A standard system in which a route, bridge, or raft is assigned class number(s) representing the load it can carry. Vehicles are also assigned number(s) indicating the minimum class of route, bridge, or raft they are authorized to use. (See also route classification.) See FMs 5-36 and 17-95.
- military operations in a built-up area (MOBA) (Army) All military actions planned and conducted on a topographical complex and its adjacent natural terrain where man-made construction is the dominant feature. It includes combat in cities, which is that portion of military operations on urbanized terrain involving house-to-house and street-by-street fighting in towns and cities. See FMs 90-10 and 90-10-1.
- military operations on urbanized terrain (MOUT) All military actions planned and conducted on a topographical complex and its adjacent natural terrain where man-made construction is the dominant feature. It includes combat-in-cities, which is that portion of MOUT involving house-to-house and street-by-street fighting in towns and cities. See FMs 90-10 and 90-10-1.
- military operations other than war (MOOTW) (JP 1-02) Operations that encompass the use of military capabilities across the range of military operations short of war. These military actions can be applied to complement any combination of the other instruments of national power and occur before, during, and after war. (See also counterdrug (CD), counterinsurgency, domestic emergencies, humanitarian assistance (HA), and peace operations.) See FM 100-20 and JP 3-07.
- military police response forces (Army) Those forces the commander assigns the mission of responding to and conducting operations to close with and destroy or delay attacking enemy forces beyond the capabilities of base defenses (Level II). See FM 19-1.
- **military science** (Army) A systemized knowledge of the principles of war; the systematic development, examination, and dissemination of appropriate methods; and the systematic development, examination, and understanding of capabilities.
- **military strategy** (JP 1-02) The art and science of employing the armed forces of a nation to secure the objectives of national policy by the application of force or the threat of force. See FM 100-5.

- minefield (JP 1-02, NATO) In land warfare, an area of ground containing mines laid with or without a pattern.

 3-30
- **minefield breaching** (JP 1-02, NATO) In land mine warfare, the process of clearing a lane through a minefield under tactical conditions. (See also breach, in-stride breach, deliberate breach, covert breach, and lane.) See FMs 5-71-100, 5-101, and 90-13-1.
- minimum range (JP 1-02) 1. Least range setting of a gun at which the projectile will clear an obstacle or friendly troops between the gun and the target. 2. Shortest distance to which a gun can fire from a given position. (Army) The range at which a projectile or fuse will be armed. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- minimum-risk route (MRR) (JP 1-02) A temporary corridor of defined dimensions recommended for use by high-speed, fixed-wing aircraft that presents the minimum known hazards to low-flying aircraft transiting the combat zone. (Army) The MRR must be approved by the airspace control authority and avoids artillery, air defense weapons, landing zones, pick-up zones, forward arming and refueling points, and Army airfields. See FM 100-103. 3-5
- minimum safe distance (MSD) The minimum distance in meters from desired ground zero at which a specific degree of personnel risk and vulnerability will not be exceeded with a 99 percent assurance. The MSD is the sum of the radius of safety and the buffer distance. (See also desired ground zero (DGZ), least separation distance (LSD), and troop safety (nuclear).) See FM 100-30 and JP 3-12.2.
- misfire (JP 1-02, NATO) 1. Failure to fire or explode properly. 2. Failure of a primer or the propelling charge of a round or projectile to function wholly or in part. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- missing (JP 1-02) A casualty status for which the United States Code provides statutory guidance concerning missing members of the Military Services. Excluded are personnel who are in an absent without leave, deserter, or dropped-from-rolls status. A person declared missing is categorized as follows: a. beleaguered — The casualty is a member of an organized element that has been surrounded by a hostile force to prevent escape of its members. **b. besieged** — The casualty is a member of an organized element that has been surrounded by a hostile force for compelling it to surrender. c. captured — The casualty has been seized as the result of action of an unfriendly military or paramilitary force in a foreign country. **d. detained** — The casualty is prevented from proceeding or is restrained in custody for alleged violation of international law or other reason claimed by the government or group under which the person is being held. e. interned — The casualty is definitely known to have been taken into custody of a nonbelligerent foreign power as the result of and for reasons arising out of any armed conflict in which the Armed Forces of the United States are engaged. **f. missing** — The casualty is not present at his or her duty location due to apparent involuntary reasons and whose location is unknown. g. missing in action (MIA) — The casualty is a hostile casualty, other than the victim of a terrorist activity, who is not present at his or her duty location due to apparent involuntary reasons and whose location is unknown. (See also casualty.) See FMs 8-10, 8-10-1, 8-10-4, 8-10-14, and 8-10-24.

missing in action (MIA) — See missing.

mission (JP 1-02) — 1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefor. 2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. 3. The dispatching of one or more aircraft to accomplish one particular task.

(Army) — The commander's expression of what the unit must accomplish and for what purpose. (See also commander's intent.) See FMs 100-5, 100-90, and 101-5.

mission, enemy, terrain, troops, and time available (METT-T) — The phrase or acronym used to describe the factors that must be considered during the planning or execution of a tactical operation. See FM 101-5. (USMC) — mission, enemy, terrain and weather, troops and support available, and time available. Example considerations are:

mission — The who, what, when, where, and why that must be accomplished.

enemy — Current information concerning the enemy's strength, location, disposition, activity, equipment, and capability and a determination as to the enemy's probable course of action.

terrain (**includes weather**) — Analysis of vegetation, soil type, hydrology, climatic conditions, and light data to determine the impact the environment can have on current and future operations for both enemy and friendly operations.

troops (and support available) — The quantity, level of training, and psychological state of friendly forces, to include the availability of weapon systems and critical equipment.

time available — The time available to plan, prepare, and execute operations for both enemy and friendly forces.

mission essential task — A collective task in which an organization must be proficient to accomplish an appropriate portion of its wartime mission(s). See FMs 25-100 and 25-101.

mission essential task list (METL) — A compilation of collective mission essential tasks which must be successfully performed if an organization is to accomplish its wartime mission(s). See FMs 25-100 and 25-101.

mission-oriented protective posture (**MOPP**) — A flexible system for protection against a chemical or biological attack devised to maximize the unit's ability to accomplish its mission in a toxic environment. This posture permits maximum protection from chemical or biological attack without unacceptable reduction in efficiency. The seven levels of MOPP are shown in the table on the following page.

	MOPP LEVELS						
MOPP Equipment	MOPP READY	MASK ONLY	MOPP ZERO	MOPP 1	MOPP 2	MOPP 3	MOPP 4
Mask	Carried	Worn	Carried	Carried	Carried	Worn ¹	Worn
Overgarment	Ready ³	NOTE	Available ⁴	Worn ¹	Worn ¹	Worn ¹	Worn
Vinyl Overboot	Ready ³	NOTE	Available ⁴	Available ⁴	Worn	Worn	Worn
Gloves	Ready ³	NOTE	Available ⁴	Available ⁴	Available ⁴	Available ⁴	Worn
Helmet Protective Cover	Ready ³	NOTE	Available ⁴	Available ⁴	Worn	Worn	Worn
Chemical Protective Undergarment (CPU)	Ready ³	NOTE	Available ⁴	Worn ¹	Worn ¹	Worn ¹	Worn ¹

- 1 In hot weather, coat or hood can be left open for ventilation.
- 2 The CPU is worn under the BDU (primarily applies to SOF) or CVC coveralls.
- 3 Must be available to the soldier within two hours. Second set available in six hours.
- 4 Must be within arm's reach of soldier.

NOTE: Items can be ready or available at the commander's discretion.

mission statement — A short paragraph or sentence describing the task and purpose that clearly indicate the action to be taken and the reason therefore. It usually contains the elements of who, what, when, and where, and the reason therefore, but seldom specifies how. (See also commander's intent, operation order (OPORD), and operation plan (OPLAN).) See FMs 100-5, 100-90, and 101-5.

mission type order (JP 1-02) — 1. Order issued to a lower unit that includes the accomplishment of the total mission assigned to the higher headquarters. 2. Order to a unit to perform a mission without specifying how it is to be accomplished. (See also commander's intent, operation order (OPORD), and operation plan (OPLAN).) (Army) — Specifies what subordinate commanders are to do without prescribing how they must do it. Mission type orders enable the command to seize and maintain initiative and to set the terms of battle. Mission type orders allow subordinate leaders to exercise independent judgment and exploit hanging situations. See FM 101-5.

mobile defense (JP 1-02) — Defense of an area or position in which maneuver is used with organization of fire and utilization of terrain to seize the initiative from the enemy. (Army) — A defense that orients on the destruction or defeat of the enemy through a decisive attack by the striking force. The minimum force is committed to a fixing force to shape the penetration while the maximum combat power available to the commander is dedicated to the striking force (with a mobility greater than the enemy's) which catches the enemy as he is attempting to overcome that part of the force dedicated to defense. (See also counterattack and defensive operations.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.

mobile training team (MTT) (JP 1-02) — A team consisting of one or more US military or civilian personnel sent on temporary duty, often to a foreign nation, to give instruction. The mission of the team is to train indigenous personnel to operate, maintain, and employ weapons and support systems, or to develop a self-

training capability in a particular skill. The National Command Authorities may direct a team to train either military or civilian indigenous personnel, depending upon host nation requests.

mobility (JP 1-02, NATO) — A quality or capability of military forces which permits them to move from place to place while retaining the ability to fulfill their primary mission. (Army) — Those activities that enable a force to move personnel and equipment on the battlefield without delays due to terrain or obstacles.

mobility corridors — Areas where a force will be canalized due to terrain constructions. The mobility corridor is relatively free of obstacles and allows military forces to capitalize on the principles of mass and speed. See FMs 21-26, 34-130, and 101-5.

mobility operations — Obstacle reduction by maneuvering and engineer units to reduce or negate the effects of existing or reinforcing obstacles. The objectives are to maintain freedom of movement for maneuver units, weapon systems, and critical supplies. (See also breach, countermobility operations, survivability operations, and terrain reinforcement.) See FM 5-101.

mobility and survivability — A battlefield operating system that preserves the freedom of maneuver of friendly forces (includes breaching enemy obstacles, increasing battlefield circulation, and improving existing routes) and protects them from the effects of enemy weapon systems and from natural occurrences (includes hardening of facilities and fortification of battle positions). See FMs 5-101, 5-102, 71-100, 100-5, and 100-15.

mobilization (JP 1-02) — 1. The act of assembling and organizing national resources to support national objectives in time of war or other emergencies. 2. The process by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency. This includes activating all or part of the Reserve components as well as assembling and organizing personnel, supplies, and materiel. Mobilization of the Armed Forces includes, but is not limited to, the following categories: a. selective mobilization — Expansion of the active Armed Forces resulting from action by Congress and/or the President to mobilize Reserve component units, individual ready reservists, and the resources needed for their support to meet the requirements of a domestic emergency that is not the result of an enemy attack. **b.** partial mobilization — Expansion of the active Armed Forces resulting from action by Congress (up to full mobilization) or by the President (not more than 1,000,000 for not more than 24 consecutive months) to mobilize Ready Reserve component units, individual reservists, and the resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security. **c. full mobilization** — Expansion of the active Armed Forces resulting from action by Congress and the President to mobilize all Reserve component units in the existing approved force structure, all individual reservists, retired military personnel, and the resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security. Reserve personnel can be placed on active duty for the duration of the emergency plus six months. d. total mobilization — Expansion of the active Armed Forces resulting from action by Congress and the President to organize and/or generate additional units or personnel, beyond the existing force structure, and the resources needed for their support, to meet the total requirements of a war or other national emergency involving an external threat to the national security.

moderate risk (nuclear) (JP 1-02) — A degree of risk where anticipated effects are tolerable, or at worst a minor nuisance. (Army) — Moderate risk should not be exceeded if troops are expected to operate at full efficiency after a friendly burst. Risk is expressed in terms of risk to unwarned, exposed personnel; warned, exposed personnel; warned, protected personnel. (See also degree of risk; emergency risk (nuclear); negligible risk (nuclear); troop safety (nuclear).) See FMs 100-30 and JPs 3-12.1, 3-12.2, and 3-12.3.

- **mode of transport** (JP 1-02) The various modes used for a movement. For each mode, there are several means of transport. They include inland surface transportation (rail, road, and inland waterway); sea transport (coastal and ocean); air transportation; and pipelines. See FM 55-30.
- modularity a concept to provide force elements that are interchangeable, expandable, and tailorable to meet changing missions and needs. Modular units will combine the assets required to provide a support function or group of related functions. A module can be sent to support a deploying force without adversely affecting the ability of the parent unit to function at a reduced level.
- mortuary affairs Broadly based military program to provide care and disposition of deceased personnel. It consists of three subprograms: the current death program, the graves registration program, and the concurrent return program. (See also graves registration.) See FMs 10-63 and 100-10. 4-26
- **mosaic** (JP 1-02, NATO) An assembly of overlapping photographs that have been matched to form a continuous photographic representation of a portion of the surface of the Earth. See FMs 21-26 and 34-1.
- mounted forces Forces that project, deliver, and sustain combat power in a rapid, highly lethal, and survivable manner with sufficient combat power to occupy and control terrain to dominate adversaries within hostile environments during war and stability and support operations. They are capable of reconnaissance, either mounted or dismounted, and security operations, and have the ability to close with and defeat an enemy. See FMs 17-95 and 71-100.
- **mounted operations** (Army) The application of combat power from a mobile weapon systems platform which relies upon mechanization and technology to maximize speed, firepower, protection, and survivability in the execution of operations. See FMs 17-95 and 71-100.
- mounting (JP 1-02, NATO) 1. All preparations made in areas designated for the purpose, in anticipation of an operation. It includes the assembly in the mounting area, preparation and maintenance within the mounting area, movement to loading points, and subsequent embarkation into ships, craft, or aircraft if applicable. 2. A carriage or stand upon which a weapon is placed.
- mounting phase The period after receipt of the warning order or planning directive until aircraft take off or ships depart on the mission. During this period, joint tactical and support planning is accomplished; troops, equipment, and supplies are assembled and readied; and briefings are conducted. Marshalling takes place during the last part of the mounting phase and includes movement of participating personnel, supplies, and all equipment to departure areas, and their loading into aircraft or ships. (See also air movement, assault phase, and subsequent operations phase.)
- **movement bid** A request for clearance to move on main supply routes to other controlled routes for which a clearance is required prior to initiating the movement.
- **movement to contact** (Army) (NATO: advance to contact) A form of the offense designed to develop the situation and to establish or regain contact. (See also meeting engagement, offensive operations, and reconnaissance in force.) See FMs 7-10, 7-20, 7-30, 71-100, 71-123, and 100-15.
- **movement control** (JP 1-02) The planning, routing, scheduling, and control of personnel and cargo movements over lines of communications; also an organization responsible for these functions. (Army) Organizations responsible for these functions are movement control teams, movement control centers, and movement control activities. See FM 55-10.

- **movement credit** (JP 1-02, NATO) The allocation granted to one or more vehicles in order to move over a controlled route in a fixed time according to movement instructions.
- movement formation 1. An ordered arrangement of troops and/or vehicles for a specific purpose. 2. An ordered arrangement of two or more units, aircraft, or ships proceeding together under a commander. Types of formations include: box, column, diamond, line, vee, wedge, echelon (right or left). (See also box formation, column formation, diamond formation, line formation, vee formation, wedge formation, echelon formation, and movement techniques.) See FMs 1-111, 1-112, 7-7, 7-8, 7-10, 7-20, 7-30, 17-95, 71-100, and 71-123.
- **movement order** (JP 1-02) An order issued by a commander covering the details for a move of the command. See FM 101-5.
- **movement requirement** (JP 1-02) A stated movement mode and time-phased need for the transport of units, personnel, and/or material from a specified origin to a specified destination.
- movement schedule (JP 1-02) A schedule developed to monitor or track a separate entity whether it is a force requirement, cargo or personnel increment, or lift asset. The schedule reflects the assignment of specific lift resources (such as an aircraft or ship) that will be used to move the personnel and cargo included in a specific movement increment. Arrival and departure times at ports of embarkation, etc., are detailed to show a flow and workload at each location. Movement schedules are detailed enough to support plan implementation. See FMs 55-10, 71-123, and 101-5.
- movement table (JP 1-02, NATO) A table giving detailed instructions or data for a move. When necessary it will be qualified by the words road, rail, sea, air, etc. to signify the type of movement. It is normally issued as an annex to a movement order or instruction. (See also movement order.) See FMs 55-10, 71-123, and 101-5.
- **movement technique** Manner of traversing terrain used by a unit (such as traveling, traveling overwatch, and bounding overwatch) which is determined by the likelihood of enemy contact.
- **multiagency** Pertaining to activities or operations conducted by or through coordination with nongovernmental, international, or foreign government agencies.
- **multinational** Pertaining to activities or operations conducted by or through coordination with the military forces of two or more nations.
- **multinational operations** (JP 1-02) A collective term to describe military actions conducted by forces of two or more nations, typically organized within the structure of a coalition or alliance. See JP 0-2.
- multinational warfare See combined warfare.
- **multiparty** Pertaining to activities or operations conducted by or through coordination with two or more groups, at least one of which is not a nationally or an internationally recognized group or representative.
- **multi-spectral imagery** (JP 1-02, NATO) The image of an object obtained simultaneously in a number of discrete spectral bands. (Army) For example; thermal or infrared, visual, or light intensification. See FMs 34-2 and 34-3.

- **multispectral smoke** A specifically formulated type smoke which does not allow an observer to see through it. It is effective at blocking all observation from the unaided eye, thermal imagery, radar telemetry, and so forth.
- mutual support (JP 1-02, NATO) That support which units render each other against an enemy because of their assigned tasks, their position relative to each other and to the enemy, and their inherent capabilities. (Army) 1. It normally is associated with support rendered through fire and movement. 2. A condition which exists when positions are able to support each other by direct fire, thus preventing the enemy from attacking one position without being subjected to direct fire from one or more adjacent positions. (See also support.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.

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named area of interest (NAI) — A point or area along a particular avenue of approach through which enemy activity is expected to occur. Activity or lack of activity within an NAI will help to confirm or deny a particular enemy course of action. (See also event template.) See FM 34-130. **3-20**

nap-of-the-earth flight — See terrain flight.

- **national command** (NATO) A command that is organized by, and functions under the authority of, a specific nation. It may or may not be placed under a NATO commander.
- **national intelligence support team (NIST)** (JP 1-02) A nationally sourced team composed of intelligence and communications experts from either Defense Intelligence Agency, Central Intelligence Agency, National Security Agency, or any combination of these agencies.
- nation assistance (JP 1-02) Civil and/or military assistance rendered to a nation by foreign forces within that nation's territory during peacetime, crises or emergencies, or war based on agreements mutually concluded between nations. Nation assistance programs include, but are not limited to, security assistance, foreign internal defense, other US Code Title 10 (DOD) programs, and activities performed on a reimbursable basis by Federal agencies or international organizations. See FMs 8-42 and 100-20.

natural disaster — *See* domestic emergencies.

- **natural environment** (Army) The human ecosystem, including both the physical and biological systems that provide resources (clean air, clean water, healthy surroundings, sufficient food) necessary to sustain productive human life. Included in the natural environment are man-made structures, such as water and wastewater treatment facilities and natural cultural resources.
- **natural resource** The natural wealth of a country or area, including land, wildlife, plant life, air, water, mineral deposits, and so forth.
- naval gunfire support (NGFS) (JP 1-02) Fire provided by Navy surface gun systems in support of a unit or units tasked with achieving the commander's objectives. A subset of naval surface fire support. (See also amphibious operation and air/naval gunfire liaison company (ANGLICO).) See FMs 6-series and 71-100-3.
- **NBC defense** (JP 1-02) Nuclear defense, biological defense, and chemical defense, collectively. The term may not be used in the context of US offensive operations. 3-34 to 3-36

- **NBC monitoring** A protective measure performed by units to ensure advanced early warning for contamination hazards from the use of weapons of mass destruction. It primarily includes sensor warning of the presence of primarily nuclear or chemical materials. Monitoring may be either periodic or continuous. See FM 3-19.
- NBC reconnaissance A mission undertaken to obtain information (of military significance) about unknown NBC contamination pertaining to routes, areas, and zones. This information confirms or denies the presence or absence of NBC attacks or NBC hazards through the use of detection and identification equipment or visual observation, or by the collection of samples in any specified location or region by using NBC detection, identification, and sampling equipment. See FM 3-19.
- **NBC surveillance** The systematic observation of aerospace, surface or subsurface areas, places, persons, or things by visual, electronic, mechanical, or other means for NBC attacks or hazards. See FM 3-19.
- **NBC survey** The collection of detailed information (of military significance) pertaining to specific contaminated areas to determine the type of contaminant and degree (extent or intensity) of the NBC hazard. This survey typically determines the outer boundaries of the hazard area. (See also reconnaissance (recon, recce).) See FM 3-19.
- **near real time** (JP 1-02, NATO) Pertaining to the timeliness of data or information which has been delayed by the time required for electronic communication and automatic data processing. This implies that there are no significant delays. (See also real time.)
- **negligible risk (nuclear)** (JP 1-02) A degree of risk where personnel are reasonably safe, with the exceptions of dazzle or temporary loss of night vision. (Army) Expressed in terms of risk to unwarned, exposed personnel; warned, exposed personnel; and warned, protected personnel. (See also degree of risk (nuclear), emergency risk (nuclear), and moderate risk (nuclear).) See FM 100-30, JPs 3-12.2, and 3-12.3.
- **negligible risk levels** Level of contamination that will cause mild incapacitation among no more than 5 percent of unprotected soldiers who operate for 12 continuous hours within 1 meter of contaminated surfaces. See FM 3-5.
- **nerve agent** (JP 1-02, NATO) A potentially lethal chemical agent which interferes with the transmission of nerve impulses. See FMs 3-9 and 8-10-7.
- **nested concept** (Army) The means to achieve unity of purpose whereby each succeeding echelon's concept is nested in the other.
- **net control station (NCS)** (JP 1-02) A communications station designated to control traffic and enforce circuit discipline within a given net.
- **neutral 1.** When the temperature of the ground is approximately the same as the temperature of the lower air up to 4 meters above it. This condition has light to moderate winds and slight turbulence, and is considered average for the release of chemical agents. (See also inversion and lapse.) See FM 3-6. **2.** An individual, a group of individuals, an organization, or a nation which is not hostile or in any way supportive of only one belligerent force in a hostile environment.
- **neutrality** (JP 1-02) In international law, the attitude of impartiality, during periods of war, adopted by third states toward belligerent and recognized by the belligerent, which creates rights and duties between the

impartial states and the belligerent. In a United Nations enforcement action, the rules of neutrality apply to impartial members of the United Nations except so far as they are excluded by the obligation of such members under the United Nations Charter.

- **neutralization**(JP 1-02, NATO) In mine warfare, a mine is said to be neutralized when it has been rendered, by external means, incapable of firing on passage of a target, although it may remain dangerous to handle. See FMs 5-34 and 5-101.
- **neutralization fire** (JP 1-02) Fire which is delivered to render the target ineffective or unusable. (NATO) Fire that is delivered to hamper and interrupt movement and/or the firing of weapons. (Army) Fires which are intended to render a target out of the battle temporarily by causing a minimum of 10 percent casualties. See FM 6-20-10.
- neutralize (JP 1-02) As pertains to military operations, to render ineffective or unusable. (Army) —
 1. To render enemy personnel or material incapable of interfering with a particular operation.
 2. To render safe mines, bombs, missiles, and boobytraps.
 3. To make harmless anything contaminated with a chemical agent.
- N-hour/N-hour sequence The unspecified time that commences unit notification and outload for rapid, nonotice deployment on a contingency operation. N-hour initiates a predetermined sequence of events that enables the unit to recall personnel, complete crisis action planning, conduct final personnel readiness procedures, draw and prepare equipment for deployment, and move to a point of embarkation for immediate deployment.
- **no-fire area** (**NFA**) An area in which no fires or effects of fires are allowed. Two exceptions are (1) when establishing headquarters approves fires temporarily within the NFA on a mission basis, and (2) when the enemy force within the NFA engages a friendly force, the commander may engage the enemy to defend his force. 3-21
- **no-fire line (NFL)** (JP 1-02, NATO) A line short of which artillery or ships do not fire except on request or approval of the supported commander, but beyond which they may fire at any time without danger to friendly troops.
- **nonaligned state** (JP 1-02) A state which pursues a policy of nonalignment.
- **nonalignment** (JP 1-02) The political attitude of a state which does not associate or identify itself with the political ideology or objective espoused by other states, groups of states, or international causes, or with the foreign policies stemming therefrom. It does not preclude involvement, but expresses the attitude of no precommitment to a particular state (or block) or policy before a situation arises.
- **nonbattle injury** A person who becomes a casualty due to circumstances not directly attributable to hostile action or terrorist activity. Casualties due to the elements, self-inflicted wounds, and combat fatigue are nonhostile casualties.
- **noncombatant 1.** An individual, in an area of combat operations, who is not armed and is not participating in any activity in support of any of the factions or forces involved in combat. **2.** An individual, such as a chaplain or medical personnel, whose duties do not involve combat.

- **noncombatant evacuation operations (NEO)** (JP 1-02) Operations conducted to relocate threatened noncombatants from locations in a foreign country. These operations normally involve US citizens whose lives are in danger, and may also include selected foreign nationals. See FMs 90-29, 100-5, and JP 3-07.
- **nongovernmental organization (NGO)** (JP 1-02) Transnational organizations of private citizens that maintain a consultative status with the Economic and Social Council of the United Nations. NGOs may be professional associations, foundations, multinational businesses, or simply groups with a common interest in humanitarian assistance activities (development and relief). NGO is a term normally used by non-US organizations. (Army) NGO is the equivalent of the term private voluntary organization (PVO) used in the United States. (See also military operations other than war (MOOTW) and support and stability operations (SASO).) See FM 100-20 and JP 3-07.
- **nonhostile casualty** (JP 1-02) A person who becomes a casualty due to circumstances not directly attributable to hostile action or terrorist activity. Casualties due to the elements, self-inflicted wounds, and combat fatigue are nonhostile casualties. See FMs 8-10, 8-10-1, 8-10-4, 8-10-14, and 8-10-24.
- **nonlethal fires** Any fires that do not directly seek destruction of the intended target and are designed to impair, disrupt, or delay the performance of enemy operational forces, functions, and facilities. Psychological operations, special operations forces, electronic warfare (jamming), and other command and control countermeasures are all nonlethal fire options. See FMs 6-20 series, 34-1, and 100-25.
- **nonpersistent agent** A chemical agent that, when released, dissipates or loses its ability to cause casualties from within minutes to several hours. See FM 3-9.
- **nonproliferation** Efforts focusing on preventing the spread of missiles and weapons of mass destruction via such mechanisms as arms, technology, and export controls. See FM 100-30.
- **nonunit-related cargo** All equipment and supplies requiring transportation to an area of operations other than that identified as the equipment or accompanying supplies of a specific unit. See FM 701-58.
- **North Atlantic Treaty Organization** (NATO) An organization of nations in North America and Western Europe that have common political goals.
- **notice to airmen** (**NOTAM**) (JP 1-02, NATO) A notice containing information concerning the establishment, condition, or change in any aeronautical facility, service, procedures, or hazard, the timely knowledge of which is essential to personnel concerned with flight operations. See FMs 1-103 and 1-111.
- **not mission capable, maintenance (NMCM)** (JP 1-02) Material condition indicating that systems and equipment are not capable of performing any of their assigned missions because of maintenance requirements. See FM 63-2.
- **not mission capable, supply (NMCS)** (JP 1-02) Material condition indicating that systems and equipment are not capable of performing any of their assigned missions because of maintenance work stoppage due to a supply shortage. See FM 63-2.
- nuclear, biological, and chemical warning and reporting system (NBCWRS) The primary means of warning units of an actual or a predicted NBC hazard. The report formats are standardized by ATP 45/STANAG 2103 Ch 4 (Jan 89) and the US Message Text Format (USMTF). See FM 3-3. It consists of six standardized reports:
 NBC 1 Initial report.

NBC 2 — Evaluated data.

NBC 3 — Predicted contamination/hazard areas.

NBC 4 — Monitoring/survey results.

NBC 5 — Actual contamination areas.

NBC 6 — Detailed information.

nuclear collateral damage (JP 1-02, NATO) — Undesired damage or casualties produced by the effects from friendly nuclear weapons. See FM 100-30, JPs 3-12.2, and 3-12.3.

nuclear damage assessment (JP 1-02, NATO) — The determination of the damage effect to the population, forces, and resources resulting from actual nuclear attack. It is performed during and after an attack. The operational significance of the damage is not evaluated in this assessment. See FM 100-30, JPs 3-12.2, and 3-12.3.

nuclear strike warning (JP 1-02, NATO) — A warning of impending friendly or suspected enemy nuclear attack. See FM 100-30, JPs 3-12.2, and 3-12.3.

nuclear weapon option — A discrete grouping of a specific number of nuclear weapons by specific yield planned for employment in a specific area for a designated time frame. See FM 100-30, JPs 3-12.2, and 3-12.3.

nuclear yields (JP 1-02) — The energy released in the detonation of a nuclear weapon measured in terms of the kilotons or megatons of trinitrotoluene (TNT) required to produce the same energy release. See FM 100-30, JPs 3-12.2, and 3-12.3. Yields are categorized as:

Very low — less than 1 kiloton.

Low — 1 kiloton to 10 kilotons.

Medium — over 10 kilotons to 50 kilotons.

High — over 50 kilotons to 500 kilotons.

Very high — over 500 kilotons.

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objective (JP 1-02, NATO) — The physical object of the action taken, e.g., a definite tactical feature, the seizure and/or holding of which is essential to the commander's plan. (Army) — **1.** The physical object of the action taken (for example, a definite terrain feature, the seizure or holding of which is essential to the commander's plan, or, the destruction of an enemy force without regard to terrain features). **2.** The clearly defined, decisive, and attainable aims which every military operation should be directed towards. **3.** The most important decisive points. (See also decisive point.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.

objective area (JP 1-02, NATO) — **1.** A defined geographical area within which is located an objective to be captured or reached by the military forces. This area is defined by competent authority for purposes of command and control. (DOD) **2.** The city or other geographical location where a civil disturbance is occurring or is anticipated, and where Federal Armed Forces are, or may be, employed. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-20, and 101-5.

obscurant — A gas, liquid, solid particle, or combination of these, either man-made (such as smoke) or natural (such as dust), suspended in the atmosphere, that may attenuate or block any portion of the electromagnetic spectrum. This can affect such things as visual observation, laser rangefinders or designators, radars, and thermal sites.

- **obscuration** The effects of weather, battlefield dust, and debris, or the use of smoke munitions to hamper observation and target-acquisition capability or to conceal activities or movement.
- **obscuring smoke** Smoke placed between enemy forces and friendly forces or directly on enemy positions to confuse and disorient enemy direct-fire gunners and artillery forward observers. See FM 3-100. 3-24
- **observation post (OP)** (JP 1-02, NATO) A position from which military observations are made, or fire directed and adjusted, and which possesses appropriate communications; it may be airborne. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **observed fire** (JP 1-02, NATO) Fire for which the point of impact or burst can be seen by an observer. The fire can be controlled and adjusted on the basis of observation. See FMs 6-series and 7-90.
- **observer-target line** (JP 1-02, NATO) An imaginary straight line from the observer/spotter to the target. See FMs 6-series and 7-90.
- **obstacle** (JP 1-02) Any obstruction designed or employed to disrupt, fix, turn, or block the movement of an opposing force, and to impose additional losses in personnel, time, and equipment on the opposing force. Obstacles can exist naturally or can be man-made, or can be a combination of both. (Army) Obstacles can be used to protect friendly forces from close assault. (See also reinforcing obstacles.) See FM 90-7.
- **obstacle belt** (JP 1-02) A brigade-level command and control measure, normally given graphically, to show where within an obstacle zone the ground tactical commander plans to limit friendly obstacle employment and focus the defense. It assigns an intent to the obstacle plan and provides the necessary guidance on the overall effect of obstacles within a belt. (Army) It also supports the intent of the higher headquarters obstacle zone. (See also obstacle.) See FM 90-7.
- **obstacle group** Normally, a task force-level obstacle control measure that specifies the location of one or more obstacles grouped to provide a specific obstacle effect. Obstacle groups are shown using the obstacle effect graphics. See FM 90-7.
- **obstacle line** A conceptual control measure used at battalion or brigade level to show placement intent without specifying a particular type of linear obstacle. 3-29
- **obstacle plan** That part of an operation plan (OPLAN) (or order) which is concerned with the use of obstacles to enhance friendly fires or to affect the movement of an enemy. Obstacle plans are used at corps level and below. (See also countermobility operations and obstacle.) See FM 90-7.
- **obstacle restricted areas** (JP 1-02) A command and control measure used to limit the type or number of obstacles within an area. (Army) A commander may use restricted areas to prevent subordinates from emplacing obstacles in certain areas. The restricted area is labeled "NO OBSTACLES." (See also obstacle.) See FM 90-7. 3-31
- **obstacle zone** (JP 1-02) A division-level command and control measure, normally done graphically, to designate specific land areas where lower echelons are allowed to employ tactical obstacles. (See also countermobility operations and obstacle.) See FM 90-7.

- occupy 1. A tactical task in which a force moves onto an objective, key terrain, or other man-made or natural terrain area without opposition, and controls that entire area. 2. To remain in an area and retain control of that area.
- **offensive** A principle of war by which a military force achieves decisive results by acting with initiative, employing fire and movement, and sustaining freedom of maneuver and action while causing an enemy to be reactive.
- **offensive counterair** (**OCA**) Combat operations that take the initiative to destroy the enemy's ability to operate in the aerospace environment by attacking systems (or their support systems) designed to operate in the atmosphere (for example: a directed-energy system operating in space used to destroy or degrade enemy airfields.).
- **offensive counterspace (OCS)** Combat operations conducted against enemy systems (or their support systems) designed to operate in space (for example: a directed-energy weapon operating from an aircraft or ground location that is used to destroy enemy satellites.).
- offensive operations Combat operations designed primarily to destroy the enemy. Offensive operations may be undertaken to secure key or decisive terrain, to deprive the enemy of resources or decisive terrain, to deceive or divert the enemy, to develop intelligence, and to hold the enemy in position. Forms of offensive operations include movement to contact, attack, exploitation, and pursuit. The offensive is undertaken to seize, retain, and exploit the initiative. (See also attack, movement to contact, and reconnaissance in force.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, and 101-5.
- on-call(JP 1-02) 1. A term used to signify that a prearranged concentration, air strike, or final protective fire may be called for. 2. Preplanned, identified force or material requirements without designated time-phase and destination information. Such requirements will be called forward upon order of competent authority. (See also call for fire.) See FMs 6-series, 7-90.
- **on-call resupply** (JP 1-02) A resupply mission planned before insertion of a special operations team into the operations area but not executed until requested by the operating team.
- **on-call target** (JP 1-02, NATO) In artillery and naval gunfire support, a planned target other than a scheduled target on which fire is delivered when requested. (See also scheduled target.) See FMs 6-series and 7-90.
- **on-order mission** A mission to be executed at an unspecified time in the future. A unit with an on-order mission is a committed force. The commander envisions task execution in the concept of operations; however, he may not know the exact time or place of execution. Subordinate commanders develop plans or orders and allocate resources, task-organize, and position forces for execution. (See also be-prepared mission.) See FM 101-5.
- **one day's supply** (JP 1-02, NATO) A unit or quantity of supplies adopted as a standard of measurement, used in estimating the average daily expenditure under stated conditions. It may also be expressed in terms of a factor, e.g., rounds of ammunition per weapon per day.
- **operating level of supply** (JP 1-02) The quantities of material required to sustain operations in the interval between requisitions or the arrival of successive shipments. These quantities should be based on the established replenishment period (monthly, quarterly, etc).

- **operation** (JP 1-02, NATO) A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defense, and maneuvers needed to gain the objectives of any battle or campaign. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, and 101-5.
- **operational art** (JP 1-02) The employment of military forces to attain strategic and/or operational objectives through the design, organization, integration, and conduct of strategies, campaigns, major operations, and battles. Operational art translates the joint force commander's strategy into operational design, and, ultimately, tactical action, by integrating the key activities at all levels of war. See FMs 100-5 and 100-15.
- operational command (OPCOM) (NATO only) 1. The term is synonymous with operational control and is uniquely applied to the operational control exercised by the commanders of combatant, unified, and specified commands over assigned forces. 2. The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational or tactical control as may be deemed necessary. It does not include responsibility for administration or logistics. OPCOM may also be used to denote the forces assigned to a commander. (See also operational control (OPCON).)
- operational control (OPCON) (JP 1-02) Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority). Operational control may be delegated and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. Operational control does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. (See also assign, attack, detachment, and operational command (OPCOM).) See JP 0-2.
- operational decontamination (JP 1-02, NATO) Decontamination carried out by an individual and/or a unit, restricted to specific parts of operationally essential equipment, materiel and/or working areas, in order to minimize contact and transfer hazards and to sustain operations. This may include decontamination of the individual beyond the scope of immediate decontamination, as well as decontamination of mission-essential spares and limited terrain decontamination. See FM 3-5.
- **operational decontamination operations** A decontamination operation that consists of two techniques, the mission-oriented protective posture (MOPP) gear exchange and the vehicle washdown. See FM 3-5.
- **operational environment** (JP 1-02) A composite of the conditions, circumstances, and influences which affect the employment of military forces and bear on the decisions of the unit commander. Some examples are: **a. permissive environment** operational environment in which host country military and law enforcement agencies have control and the intent and capability to assist operations that a unit intends to conduct. **b. uncertain environment** operational environment in which host government forces, whether opposed to or receptive to operations that a unit intends to conduct, do not have totally effective control of the territory and population in the intended area of operations. **c. hostile environment** operational

- environment in which hostile forces have control and the intent and capability to effectively oppose or react to the operations a unit intends to conduct.
- **operational intelligence** (JP 1-02) Intelligence that is required for planning and conducting campaigns and major operations to accomplish strategic objectives within theaters or areas of operations. (See also intelligence, strategic intelligence, and tactical intelligence.) See FM 34-1.
- operational level of war (JP 1-02) The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives. See FMs 100-5 and 100-15.
- **operationally ready** (JP 1-02) **1.** As applied to a unit, ship, or weapon system Capable of performing the missions or functions for which organized or designed. Incorporates both equipment readiness and personnel readiness. **2.** As applied to personnel Available and qualified to perform assigned missions or functions. See FM 63-2.
- **operational operating systems** The major functions performed by joint and combined operational forces for successfully executing campaigns and major operations in a theater or area of operations. The operating systems are operational movement and maneuver, operational fires, operational protection, operational command and control, operational intelligence, and operational support. See FM 100-15.
- **operational readiness float** A quantity of selected class II and VII items authorized for use by direct support maintenance units in exchange with supported units if a like item cannot be repaired in a timely manner. See FM 63-2-1.
- **operational reserve** (JP 1-02, NATO) An emergency reserve of men and/or material established for the support of a specific operation. See FMs 100-5 and 100-15.
- operational tempo (OPTEMPO) 1. The pace of an operation or operations. The OPTEMPO includes all of the activities the unit is conducting. OPTEMPO can be a single activity or a series of operations. 2. The mileage allowed to be put on a vehicle or aircraft during a fiscal year based on budgetary guidance. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- **operation annexes** (JP 1-02) Those amplifying instructions which are of such a nature, or are so voluminous or technical, as to make their inclusion in the body of the plan or order undesirable. See FM 101-5.
- **operation exposure guide (OEG)** (JP 1-02) The maximum amount of nuclear radiation which the commander considers a unit may be permitted to receive while performing a particular mission or missions. (Army) Within the Army it is known as operational exposure guidance (OEG). (See also radiation status (RS).) See FMs 3-3-1 and 100-30.
- **operation map** (JP 1-02) A map showing the location and strength of friendly forces involved in an operation. It may indicate predicted movement and location of enemy forces. (See also map.) See FM 101-5.
- **operation order (OPORD)** (JP 1-02, NATO) A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. (Army) Also called the five

- paragraph field order, it contains as a minimum a description of the task organization, situation, mission, execution, administrative and logistics support, and command and signal for the specified operation. (See also operation plan (OPLAN).) See FM 101-5.
- **operation overlay** Overlay showing the location, size, and scheme of maneuver and fires of friendly forces involved in an operation. As an exception, it may indicate predicted movements and locations of enemy forces.
- operation plan (OPLAN) (JP 1-02) Any plan, except for the Single Integrated Operation Plan, for the conduct of military operations. Plans are prepared by combatant commanders in response to requirements established by the Chairman of the Joint Chiefs of Staff and by commanders of subordinate commands in response to requirements tasked by the establishing unified commander. Operation plans (OPLANs) are prepared in either a complete format (OPLAN) or as a concept plan (CONPLAN). The CONPLAN can be published with or without a time-phased force and deployment data (TPFDD) file. a. OPLAN. An operation plan for the conduct of joint operations that can be used as a basis for development of an operation order (OPORD). An OPLAN identifies the forces and supplies required to execute the CINC's Strategic Concept and a movement schedule of these resources to the theater of operations. The forces and supplies are identified in TPFDD files. OPLANs will include all phases of the tasked operation. The plan is prepared with the appropriate annexes, appendixes, and TPFDD files as described in the Joint Operation Planning and Execution System manuals containing planning policies, procedures, and formats. b. CONPLAN. An operation plan in an abbreviated format that would require considerable expansion or alteration to convert it into an OPLAN or OPORD. A CONPLAN contains the CINC's Strategic Concept and those annexes and appendixes deemed necessary by the combatant commander to complete planning. Generally, detailed support requirements are not calculated and TPFDD files are not prepared. (See also operation order (OPORD).) See FM 101-5.
- operations security (OPSEC) (JP 1-02) A process of identifying critical information and subsequently analyzing friendly actions attendant to military operations and other activities to: **a.** Identify those actions that can be observed by adversary intelligence systems. **b.** Determine indicators hostile intelligence systems might obtain that could be interpreted or pieced together to derive critical information in time to be useful to adversaries. **c.** Select and execute measures that eliminate or reduce to an acceptable level the vulnerabilities of friendly actions to adversary exploitation. (Army) All measures taken to maintain security and achieve tactical surprise. It includes countersurveillance, physical security, signal security, and information security. It also involves the identification and elimination or control of indicators which can be exploited by hostile intelligence organizations. (See also command and control warfare (C²W).) See FMs 34-40 and 101-5.
- **operator's spraydown** Process of applying decontaminant onto unit equipment control surfaces to stop contamination from spreading, transferring, or soaking into surfaces. See FM 3-5.
- **opposed entry** A military operation to enter an area against opposition. (See also air assault, airborne, amphibious operation, and assault echelon.) See FMs 1-111, 7-20, 7-30, 71-100-2, 71-100-3, 90-4, and 90-26.
- order (JP 1-02, NATO) A communication, written, oral, or by signal, that conveys instructions from a superior to a subordinate. (DOD) In a broad sense, the terms "order" and "command" are synonymous. However, an order implies discretion as to the details of execution whereas a command does not. (Army) Also synonymous with requisition as used in "back order." (See also fragmentary order (FRAGO), movement order, operation order (OPORD), overlay order, and warning order (WARNO).) See FMs 100-34 and 101-5.

- **order of battle** (JP 1-02, NATO) The identification, strength, command structure, and disposition of the personnel, units, and equipment of any military force.
- **orders group** A standing group of key personnel requested to be present when a commander at any level issues his concept of operations and his order. See FM 101-5.
- **order and shipping time** (JP 1-02) The time elapsing between the initiation of stock replenishment action for a specific activity and the receipt by that activity of the materiel resulting from such action. Order and shipping time is applicable only to materiel within the supply system, and it is composed of the distinct elements, order time, and shipping time.
- **organic** (JP 1-02) Assigned to and forming an essential part of a military organization. Organic parts of a unit are those listed in its table of organization for the Army, Air Force, and Marine Corps, and are assigned to the administrative organizations of the operating forces for the Navy. (See also assign, attach, and operational control (OPCON).) See FM 101-5.
- organization 1. Any military unit or larger command comprised of two or more smaller units. In this meaning, a military element of a command is an organization in relation to its components and a unit in relation to higher commands.
 2. The definite structure of a military element prescribed by a component authority such as a table of organization. (See also unit.)
- **organization of the ground** (JP 1-02, NATO) The development of a defensive position by strengthening the natural defenses of the terrain and by assignment of the occupying troops to specific localities. See also defend.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **organophosphate** A phosphate-containing organic compound which inhibits cholinesterase enzymes that control the transmission of nerve impulses. G-series and V-series nerve agents are organophosphates. See FM 3-9.
- over (JP 1-02, NATO) In artillery and naval gunfire support, a spotting, or an observation, used by a spotter or an observer, to indicate that a burst(s) occurred beyond the target in relation to the spotting line. (Army) 1. A communications proword meaning "I have finished speaking, do/does the other party(ies) have anything to say."
 2. In direct fire, a sensing that a round or burst of rounds went above the intended target and landed beyond the target. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- overlay (JP 1-02, NATO) A printing or drawing on a transparent or semitransparent medium at the same scale as a map, chart, etc., to show details not appearing or requiring special emphasis on the original. (Army) On digital displays, a set of graphical data which can be placed or removed from another set of graphical data without causing the distortion of or damage to either set of graphical data. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- overlay order A technique used to issue an order (normally a fragmentary order) that has abbreviated instructions written on the overlay itself. On digital systems, it may have hypertext attached to a digital overlay which allows a subordinate to "click on" a key word or graphic and a text display of specific information will appear in a "window" which can be moved or closed by the user so that the graphic is fully visible. (See also operation order (OPORD), overlay, and fragmentary order (FRAGO).) See FM 101-5.

overt operation (JP 1-02) — An operation conducted openly, without concealment.

overwatch — A tactical technique in which one element is positioned to support by fire the movement of another element by observing known or suspected enemy locations and engaging the enemy if he is visible or tries to fire on the friendly element. The overwatching element must be told if it is to destroy, suppress, or fix the enemy. (See also movement technique and support by fire.)

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- packaged petroleum product (JP 1-02) A petroleum product (generally a lubricant, oil, grease, or specialty item) normally packaged by a manufacturer and procured, stored, transported, and issued in containers having a fill capacity of 55 United States gallons (or 45 Imperial gallons, or 205 liters) or less.
- **palletized unit load** (JP 1-02, NATO) Quantity of any item, packaged or unpackaged, which is arranged on a pallet in a specified manner and securely strapped or fastened thereto so that the whole is handled as a unit.
- **paramilitary forces** (JP 1-02) Forces or groups which are distinct from the regular armed forces of any country, but resembling them in organization, equipment, training, or mission.
- partial mobilization See mobilization.
- **passage of command** The exchange of responsibility for a sector or zone between the commanders of two units. The time when the command is to pass is determined by mutual agreement between the two unit commanders unless directed by higher headquarters. (See also passage of lines, battle handover, and relief in place (RIP).) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- passage of lines (JP 1-02, NATO) An operation in which a force moves forward or rearward through another force's combat positions with the intention of moving into or out of contact with the enemy. (Army) Passing one unit through the positions of another, as when elements of a covering force withdraw through the forward edge of the main battle area, or when an exploiting force moves through the elements of the force that conducted the initial attack. A passage may be designated as a forward or rearward passage of lines. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- passage point (PP) A specifically designated place where units will pass through one another either in an advance or a withdrawal. It is located where the commander desires subordinate units to physically execute a passage of lines. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **passive air defense** (JP 1-02, NATO) All measures, other than active air defense, taken to minimize the effectiveness of hostile air action. These measures include deception, dispersion, and the use of protective construction. (See also active air defense and air defense.) See FMs 44-63 and 44-100.
- passive defense (Army) Applies to measures initiated to reduce vulnerability and to minimize damage caused by theater missile (TM) attacks. Passive defense includes TM counterproliferation and deterrence; TM early warning and nuclear, biological, and chemical protection; countersurveillance; deception; camouflage and concealment; hardening; electronic warfare; mobility; dispersal; redundancy; recovery, and reconstitution.
- **passive defense measures** Measures taken to reduce the possibilities or effects of nuclear, biological, and chemical attack. See FM 3-3.
- **pass time** (JP 1-02, NATO) In road transport, the time that elapses between the moment when the leading vehicle of a column passes a given point and the moment when the last vehicle passes the same point.

- **password** (JP 1-02, NATO) A secret word or distinctive sound used to reply to a challenge. (See also challenge.)
- pathfinders (JP 1-02) 1. Experienced aircraft crews who lead a formation to the drop zone (DZ), release point, or target. 2. Teams dropped or airlanded at an objective to establish and operate navigational aids for the purpose of guiding aircraft to drop and landing zones. 3. A radar device used for navigating or homing to an objective when visibility precludes accurate visual navigation. 4. Teams air delivered into enemy territory for the purpose of determining the best approach and withdrawal lanes, landing zones, and sites for heliborne forces. (See also landing zone control party.) See FMs 90-4 and 90-26.
- **pathogen(s)** Disease-producing microorganisms such as bacteria, mycoplasma, rickettsia, fungi, or viruses. See FMs 3-9, 8-10-7, and 8-33.
- **patient** (JP 1-02) A sick, injured, wounded, or other person requiring medical/dental care or treatment. See FMs 8-10, 8-10-1, and 8-10-6.
- patient decontamination The process of decontaminating contaminated patients using nonmedical personnel as patient decontamination teams working under the supervision of medical personnel. The patient decontamination process is performed at a location adjacent to the supporting medical treatment facility. See FMs 8-10-1, 8-10-4, and 8-10-7. (See also patient decontamination team.)
- **patient decontamination team** A team composed of nonmedical personnel designated by the echelon commander to perform patient decontamination under supervision of medical personnel. See FMs 8-10-1, 8-10-4, and 8-10-7.
- **patrol** (JP 1-02, NATO) A detachment of ground, sea, or air forces sent out for the purpose of gathering information or carrying out a destructive, harassing, mopping-up, or security mission. See FMs 7-7, 7-8, and 7-10.
- **patrol base** The point of origin of a patrol where all equipment not required for the patrol is left. All supplies necessary for resupplying the patrol and additional medical supplies and assistance are staged at this location. See FMs 7-7, 7-8, and 7-10.
- payload (JP 1-02, NATO) 1. The sum of the weight of passengers and cargo that an aircraft can carry.
 2. The warhead, its container, and activating devices in a military missile.
 3. The satellite or research vehicle of a space probe or research missile.
 4. The load (expressed in tons of cargo or equipment, gallons of liquid, or number of passengers) which the vehicle is designed to transport under specified conditions of operation, in addition to its unladen weight. See FM 55-30.
- **peace building** (JP 1-02) Postconflict actions, predominately diplomatic and economic, that strengthen and rebuild governmental infrastructure and institutions in order to avoid a relapse into conflict. See FM 100-23 and JP 3-07.
- **peace enforcement** (JP 1-02) Application of military force, or the threat of its use, normally pursuant to international authorization, to compel compliance with resolutions or sanctions designed to maintain or restore peace and order. See FMs 100-20, 100-23, and JP 3-07.
- **peacekeeping** (JP 1-02) Military operations undertaken with the consent of all major parties to a dispute, designed to monitor and facilitate implementation of an agreement (cease fire, truce, or other such agreement)

- and support diplomatic efforts to reach a long-term political settlement. See FMs 100-20, 100-23, and JP 3-07.
- **peacemaking** (JP 1-02) The process of diplomacy, mediation, negotiation, or other forms of peaceful settlements that arranges an end to a dispute, and resolves issues that led to it. See FMs 100-20, 100-23, and JP 3-07.
- **peace operations** (JP 1-02) A broad term that encompasses peacekeeping operations and peace enforcement operations conducted in support of diplomatic efforts to establish and maintain peace. See FMs 100-20, 100-23, and JP 3-07.
- **pecuniary liability** (JP 1-02) A personal, joint, or corporate monetary obligation to make good any lost, damaged, or destroyed property resulting from fault or neglect. It may also result under conditions stipulated in a contract or bond.
- **penetration** (JP 1-02, NATO) In land operations, a form of offensive which seeks to break through the enemy's defense and disrupt the defensive system. (Army) A choice of maneuver. (See also choice of maneuver.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- **perimeter defense** (JP 1-02) A defense without an exposed flank, consisting of forces deployed along the perimeter of the defended area. (See also defensive operations and strongpoint (SP).) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- **periodic intelligence summary (PERINTSUM)** (JP 1-02) A report of the intelligence situation in a tactical operation, normally produced at corps level or its equivalent, and higher, usually at intervals of 24 hours, or as directed by the commander. See FMs 34-1, 34-2, 34-3, and 34-8.
- **periodic monitoring** The periodic check of the unit area for presence of beta or gamma radiation. It is performed when intelligence indicates threat use of nuclear weapons, nuclear warfare has been initiated, the dose rate falls below 1 centigray per hour, or when ordered by the unit commander. See FM 3-100.
- **permissive environment** *See* operational environment.
- **persistency** (JP 1-02, NATO) In biological or chemical warfare, the characteristic of an agent which pertains to the duration of its effectiveness under determined conditions after its dispersal. See FM 3-9.
- **persistent chemical agent** A liquid or dust-like compound that remains hazardous for hours, days or, in exceptional cases, weeks or more. It can be both a surface contact hazard or an airborne (vapor or particle) hazard. It can be picked up on a surface and might not be removed through decontamination; it can be spread to noncontaminated areas retaining its original lethality.
- **personal wipedown** Process of removing or neutralizing contamination from the individual's equipment including the protective mask, hood, gloves, weapon, and helmet. It is performed to stop the spread, transfer, and penetration of contamination. See FM 3-5.
- **petroleum, oils, and lubricants (POL)** (JP 1-02, NATO) A broad term which includes all petroleum and associated products used by the Armed Forces. (Army) Also known as class III supplies. See FM 100-10. 3-39 4-28

- phase A specific part of an operation that is different from those that precede or follow. A change in phase usually involves a change of task. Phasing assists in planning and controlling and may be indicated by time (preparatory fire phase), by distance (intermediate objective or report line), by terrain (crossing of an obstacle), or by occurrence of an event (commitment of a reserve). It is not to be confused with a phase line (PL). It normally is associated in campaign planning with operations of larger units and with special operations (such as river crossing and airborne operations). Each phase may be defined by a change in task organization or a distinct end state. See FM 101-5.
- phase line (PL) (JP 1-02, NATO) A line used for control and coordination of military operations, usually a terrain feature extending across the zone of action. (Army) It is usually along a recognizable terrain feature extending across the sector or zone of action. Units normally report crossing PLs, but do not halt unless specifically directed. See FMs 7-10, 7-20, 7-30, 17-1, 17-2, 17-3, 71-100, 100-15, and 101-5.
- **physical security** (JP 1-02, NATO) That part of security concerned with physical measures designed to safeguard personnel; to prevent unauthorized access to equipment, installations, material, and documents; and to safeguard them against espionage, sabotage, damage, and theft. (See also operations security (OPSEC) and communications security (COMSEC).) See FMs 19-1 and 34-1.
- **pickup zone** (**PZ**) A geographic area used to pick up troops or equipment by helicopter. 3-13
- **pickup zone control officer (PZCO)** The officer designated by the commander with the responsibility for establishing, organizing, setting up, and controlling the pickup zone during air assault PZ operations. See FMs 1-111, 71-100-3, and 90-4.
- **pickup zone control party** The personnel designated to assist the pickup zone control officer with the establishment, setting up, and controlling of the PZ. See FMs 1-111, 71-100-3, and 90-4.
- **pilot report (PIREP)** A report rendered by a pilot during a mission containing the specified information. A PIREP could be for reconnaissance, enemy contact, weather, battle damage assessment, or any number of other requirements. See FM 71-100-3.
- planned target (JP 1-02, NATO) In artillery and naval gunfire support, a target on which fire is prearranged. (Army) A target is planned on an area or a point in which a need is anticipated. A planned target may be scheduled or on call. Firing data for a planned target is normally calculated in advance. Coordination with friendly troops and aircraft is mandatory. (See also scheduled target, on-call target, and priority target.) See FMs 6-series and 7-90.
- **planning factor** (JP 1-02, NATO) A multiplier used in planning to estimate the amount and type of effort involved in a contemplated operation. Planning factors are often expressed as rates, ratios, or lengths of time. See FMs 101-5, 101-10-1, and 101-10-2.
- **point defense** (JP 1-02) The defense or protection of special vital elements and installations; e.g., command and control facilities, air bases. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 44-100, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **point of departure (PD)** In night or limited visibility attacks, a specific place on the line of departure where a unit will cross. 3-17

- point obstacle Any obstruction designed or employed to deny ease of movement on a road, lane, or bridge that is normally part of or completes a larger man-made or natural obstacle that has a designed effect on the attacking enemy force. (See also abatis, cratering charge, log crib, log hurdle, log posts, and road block.)

 3-29
- **point target** (JP 1-02) **1.** A target of such small dimension that it requires the accurate placement of ordnance in order to neutralize or destroy it. **2. nuclear** A target in which the ratio of radius of damage to target radius is equal to or greater than 5. See FMs 6-series and 7-90.
- **pop-up point (PUP)** The location at which aircraft quickly gain altitude for target acquisition and engagement. (See also target box.) 3-6
- **port** (JP 1-02) A place at which ships may discharge or receive their cargoes. It includes any port accessible to ships on the seacoast, navigable rivers, or inland waterways. The term "ports" should not be used in conjunction with air facilities which are designated as aerial ports, airports, etc.
- port of debarkation (POD) (JP 1-02) The geographic point at which cargo or personnel are discharged. May be a seaport or aerial port of debarkation. For unit requirements, it may or may not coincide with the destination. (See also port of embarkation (POE).) See FM 55-10. 4-29
- **port of embarkation (POE)** (JP 1-02) The geographic point in a routing scheme from which cargo or personnel depart. May be a seaport or aerial port from which personnel and equipment flow to port of debarkation. For unit and nonunit requirements, it may or may not coincide with the origin. (See also port of debarkation (POD).) See FM 55-10. 4-29
- **position 1.** A location or area occupied by a military unit. **2.** The location of a weapon, unit, or individual from which fire is delivered upon a target. Positions may be classified as primary, alternate, subsequent, and supplementary positions. (See also alternate position, battle position (BP), primary position, subsequent position, and supplementary position.)
- position area for artillery (PAA) An area assigned to an M109A6 Paladin platoon and other artillery units for terrain management purposes in which the artillery can maneuver. See FM 6-20-60.
- **postconflict activity** Those stability and support operations which are conducted in the period following conflict termination.
- **power projection** The ability of the nation to apply all or some of the instruments of national power (diplomatic, economic, informational, or military) to respond to crisis, to contribute to deterrence, and to enhance regional stability. See FM 100-5.
- **precedence** (JP 1-02) 1. communications--A designation assigned to a message by the originator to indicate to communications personnel the relative order of handling and to the addressee the order in which the message is to be noted. 2. reconnaissance A letter designation, assigned by a unit requesting several reconnaissance missions, to indicate the relative order of importance, within an established priority, of the mission requested. (Army) Examples of communication precedence from most immediate to least are flash, immediate, priority, and routine.

- **preclusion of damage** A nuclear planning restriction used in conjunction with least separation distance to avoid damage to important structures. If appropriate, it is included in the commander's guidance. (See also least separation distance (LSD) and preclusion of obstacles.) See FM 100-30, JPs 3-12.2, and 3-12.3.
- **preclusion of obstacles** A nuclear planning restriction used in conjunction with least separation distance which, if appropriate, is included in the commander's guidance. It can include preclusion of fallout and tree blowdown. (See also least separation distance (LSD) and preclusion of damage.) See FM 100-30.
- **preclusion-oriented method analysis** A method of analyzing nuclear targets used when detailed information about size, composition, disposition, location, and movement is not available. See FM 100-30, JPs 3-12.2, and 3-12.3.
- **preemptive attack** (JP 1-02) An attack initiated on the basis of incontrovertible evidence that an enemy attack is imminent. See FMs 100-5 and 100-40.
- **preparation fire** (JP 1-02, NATO) Fire delivered on a target preparatory to an assault. (Army) Normally the preparation fires include (if available) artillery, mortar, naval gunfire, and close air support to destroy, neutralize, or suppress the enemy's defense and to disrupt communications and disorganize the enemy's defense. (See also artillery preparation.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **preplanned air support** (JP 1-02, NATO) Air support in accordance with a program, planned in advance of operations.
- **preposition** (JP 1-02, NATO) To place military units, equipment, or supplies at or near the point of planned use or at a designated location to reduce reaction time, and to ensure timely support of a specific force during initial phases of an operation. See FM 100-5.
- **prepositioned supplies** Supplies located at or near the point of planned use or at other designated locations to reduce reaction time and to ensure resupply.
- **prescribed load** The quantity of combat essential supplies and repair parts (other than ammunition) authorized by major commanders to be on hand in units and which is carried by individuals or on unit vehicles. The prescribed load is continuously reconstituted as used.
- **preventive maintenance (PM)** (JP 1-02) The care and servicing by personnel for the purpose of maintaining equipment and facilities in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects. (See also preventive maintenance, checks, and services.)
- **preventive maintenance checks and services (PMCS)** Operator-level maintenance conducted before, during, and after equipment operations to identify actual and potential problems and to make repairs in a timely manner to minimize equipment downtime. See FMs 1-111, 7-90, 7-91, 17-12, 23-1, and 63-20.
- **preventive medicine (PVNTMED)** Measures to counter the medical threat and prevent disease and injury.
- **primary position** A place for a weapon, a unit, or an individual to fight that provides the best means to accomplish the assigned mission. (See also alternate position, battle position (BP), position, subsequent position, successive positions, and supplementary position.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.

- **prime mover** (JP 1-02) A vehicle, including heavy construction equipment, possessing military characteristics, designed primarily for towing heavy, wheeled weapons and frequently providing facilities for the transportation of the crew of, and ammunition for, the weapon.
- principal direction of fire (PDF) The direction of fire assigned or designated as the main direction in which a weapon will be oriented. It is selected based on the enemy, mission, terrain, and weapons capability.
- **principles of war** Principles that guide warfighting at the strategic, operational, and tactical levels. They are the enduring bedrock of US military doctrine. See FM 100-5.
- **priority of effort** The element designated by the commander to receive a higher concentration of support assets for the duration that it remains the priority of effort. See FM 101-5.
- **priority of fires** The organization and employment of fire support means according to the importance of the supported unit's missions. See FM 6-series.
- **priority intelligence requirements** (**PIR**) (JP 1-02, NATO) Those intelligence requirements for which a commander has an anticipated and stated priority in his task of planning and decisionmaking. (See also information requirements (IR) and commander's critical information requirements (CCIR).) See FM 34-1.
- **priority message** (JP 1-02) A category of precedence reserved for messages that require expeditious action by the addressee(s) and/or furnish essential information for the conduct of operations in progress when routine precedence will not suffice. (See also precedence.)
- **priority of support** Priorities set by the commander in his concept of operations and during execution to ensure that combat support and combat service support are provided to subordinate elements in accordance with their relative importance to accomplishing the mission. See FM 100-10.
- **priority target** A target on which the delivery of fires takes precedence over all the fires for the designated firing unit or element. The firing unit or element will prepare, to the extent possible, for the engagement of such targets. A firing unit or element may be assigned only one priority target. The designation may be based on either time or importance. See FM 6-series.
- prisoner of war (PW) (JP 1-02) A detained person as defined in Articles 4 and 5 of the Geneva Convention Relative to the Treatment of Prisoners of War of August 12, 1949. In particular, one who, while engaged in combat under orders of his or her government, is captured by the armed forces of the enemy. As such, he or she is entitled to the combatant's privilege of immunity from the municipal law of the capturing state for warlike acts which do not amount to breaches of the law of armed conflict. For example, a prisoner of war may be, but is not limited to, any person belonging to one of the following categories who has fallen into the power of the enemy: a member of the armed forces, organized militia or volunteer corps; a person who accompanies the armed forces without actually being a member thereof; a member of a merchant marine or civilian aircraft crew not qualifying for more favorable treatment; or individuals who, on the approach of the enemy, spontaneously take up arms to resist the invading forces. See FM 19-1.
- **private voluntary organizations (PVO)** (JP 1-02) Private, nonprofit humanitarian assistance organizations involved in development and relief activities. PVOs are normally US-based. "Private voluntary organization" is often used synonymously with the term "nongovernmental organization." (See also nongovernmental organization (NGO).) See FM 100-20 and JP 3-07. **D-8**

- **probability** The likelihood that an event will occur.
- **probable line of deployment (PLD)** A line selected on the ground, usually the last covered and concealed position prior to the objective and forward of the line of departure, where attacking units deploy prior to beginning an assault; it is generally used under conditions of limited visibility. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5. 3-18
- **program of targets** A number of planned targets of a similar nature. A program of targets identified by a code name may be initiated on call, at a specified time, or when a particular event occurs. Targets are fired in a predetermined sequence.
- **proliferation (nuclear weapons)** (JP 1-02) The process by which one nation after another comes into possession of, or into the right to determine the use of nuclear weapons, each potentially able to launch a nuclear attack upon another nation. See FM 100-30.
- propaganda (JP 1-02) Any form of communication in support of national objectives designed to influence the opinions, emotions, attitudes, or behavior of any group in order to benefit the sponsor, either directly or indirectly.
 D-1
- protect 1. A tactical task to prevent observation of or engagement or interference with, a force or location.
 2. All actions taken to guard against espionage or capture of sensitive equipment and information. (See also guard.) See FM 17-95.
- **protecting smoke** Smoke produced to defeat or degrade target acquisition, guidance systems, or directed-energy weapons. It includes the smoke blanket and smoke curtain. See FM 3-50. 3-24
- **protective obstacles** Obstacles employed to assist a unit in its local, close-in protection. (See also obstacle.) See FM 90-7.
- psychological operations (PSYOP) (JP 1-02) Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of psychological operations is to induce or reinforce foreign attitudes and behavior favorable to the originator's objectives.

 4-30

 D-6
- **psychological warfare** (JP 1-02) The planned use of propaganda and other psychological actions having the primary purpose of influencing the opinions, emotions, attitudes, and behavior of hostile foreign groups in such a way as to support the achievement of national objectives.
- **public affairs** (JP 1-02) Those public information and community relations activities directed toward the general public by the various elements of the Department of Defense. 4-27
- **pull** The need for a user of information or supplies to request each item individually and wait for the higher unit to furnish the items or fill the request.
- **purpose** (Army) The desired or intended result of the tactical operation stated in terms relating to the enemy or to the desired situation (for example, to allow passage of follow-on forces or to set the conditions for the counterattack). It is the why of the mission statement expressed using an action verb. (For example, allow, cause, influence, prevent, protect). (See also battle command, battlefield visualization, and concept of operations.) See FMs 100-5 and 101-5.

- **pursuit** (JP 1-02, NATO) An offensive operation designed to catch or cut off a hostile force attempting to escape, with the aim of destroying it. (See also offensive operations.)
- push 1. In intelligence and communications, the broadcasting of information to multiple stations simultaneously without the need for them to request or interrogate the host system. 2. In logistics, the delivery of a predetermined amount of supplies to a user on a scheduled basis without the user requesting them.

Q

- **quadrant elevation** (JP 1-02, NATO) The angle between the horizontal plane and the axis of the bore when the weapon is laid. (DOD) It is the algebraic sum of the elevation, angle of site, and complementary angle of site.
- **quartering party** A group of unit representatives dispatched to a probable new site of operations in advance of the main body to secure, reconnoiter, and organize an area prior to the main body's arrival and occupation. (See also advance party.)
- **quay** (JP 1-02) A structure of solid construction along a shore or bank which provides berthing and which generally provides cargo-handling facilities. A similar facility of open construction is called a wharf.

R

- **rad** See absorbed dose, centigray (cGy), radiation dose (RAD), and roentgen.
- **radar beacon** (JP 1-02) A receiver-transmitter combination which sends out a coded signal when triggered by the proper type of pulse, enabling determination of range and bearing information by the interrogating station or aircraft.
- **radiac** (JP 1-02, NATO) An acronym derived from the words "radioactivity, detection, indication, and computation." It is used as an all-encompassing term to designate various types of radiological measuring instruments or equipment. (This word is normally used as an adjective.) See FM 3-4.
- radiation dose (JP 1-02, NATO) The total amount of ionizing radiation absorbed by material or tissues, expressed in centigray. (DOD) The term radiation dose is often used in the sense of the exposure dose expressed in roentgens, which is a measure of the total amount of ionization that the quantity of radiation could produce in air. This could be distinguished from the absorbed dose, also given in rads, which represents the energy absorbed from the radiation per gram of specified body tissue. Further, the biological dose, in rems, is a measure of the biological effectiveness of the radiation exposure. (See also absorbed dose, exposure dose, and radiation dose rate.) See FMs 3-4, 8-9, 100-30, JPs 3-12.2, and 3-12.3.
- **radiation dose rate** (JP 1-02, NATO) The radiation dose (dosage) absorbed per unit of time. (DOD) A radiation dose rate can be set at some particular unit of time (e.g., H+1 hour) and would be called H+1 radiation dose rate. (See also radiation dose.)
- **radiation exposure state (RES)** (JP 1-02, NATO) The condition of a unit, or exceptionally an individual, deduced from the cumulative whole body radiation doses(s) received. It is expressed as a symbol which indicates the potential for future operations and the degree of risk if exposed to additional nuclear radiation.

- radiation status (RS) Criteria to assist the commander in measuring unit exposure to radiation based on total past cumulative dose in centigray (cGy). (See also dose rate, operation exposure guide (OEG), and radiation dose.) See FM 3-1-1.) Categories are as follows: a. radiation exposure status-0 (RES-0) No previous exposure history. b. radiation exposure status-1 (RES-1) Negligible radiation exposure history (greater than 0, but less than 70 cGy). c. radiation exposure status-2 (RES-2) Significant but not a dangerous dose of radiation (greater than 70, but less than 150 cGy). d. radiation exposure status-3 (RES-3) Unit has already received a dose of radiation which makes further exposure dangerous (greater than 150 cGy).
- radio fix (JP 1-02, NATO) 1. The locating of a radio transmitter by bearings taken from two or more direction finding stations, the site of the transmitter being at the point of intersection. 2. The location of a ship or aircraft by determining the direction of radio signals coming to the ship or aircraft from two or more sending stations, the locations of which are known.
- radio listening silence The situation where radios are on and continuously monitored with strict criteria when a station on the radio network is allowed to break silence. For example, "maintain radio listening silence until physical contact with the enemy is made." (See also radio silence.)
- **radiological survey** (JP 1-02, NATO) The directed effort to determine the distribution and dose rates of radiation in an area. (See also NBC survey.) See FMs 3-3-1 and 3-19.
- radio silence (JP 1-02, NATO) A condition in which all or certain radio equipment capable of radiation is kept inoperative. (DOD) (Note: In combined or United States Joint or intraservice communications, the frequency bands and/or types of equipment affected will be specified.)
- **radius of action** (JP 1-02, NATO) The maximum distance a ship, aircraft, or vehicle can travel away from its base along a given course with normal combat load and return without refueling, allowing for all safety and operating factors.
- **radius of damage (RD)** (JP 1-02) The distance from ground zero at which there is a 0.50 probability of achieving the desired damage. (See also collateral damage.) See FM 100-30, JPs 3-12.1, 3-12.2, and 3-12.3.
- **radius of vulnerability** (**RV**) (**nuclear**) The radius of a circle about ground zero within which friendly personnel will be exposed to a risk equal to, or greater than, the emergency risk criterion, or within which materiel will be subjected to a 5 percent probability of the specified degree of damage. (See also troop safety (nuclear).) See FM 100-30, JPs 3-12.1, 3-12.2, and 3-12.3.
- **raid** (JP 1-02, NATO) An operation, usually small scale, involving a swift penetration of hostile territory to secure information, confuse the enemy, or to destroy installations. It ends with a planned withdrawal upon completion of the assigned mission. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **railhead** (JP 1-02, NATO) A point on a railway where loads are transferred between trains and other means of transport. (See also aerial port and seaport.)
- rally point An easily identifiable point on the ground at which units can reassemble and reorganize if they become dispersed, or aircrews and passengers can assemble and reorganize following an incident requiring a forced landing. See FM 1-111. 3-26

- range (JP 1-02) 1. The distance between any given point and an object or target. 2. Extent or distance limiting the operation or action of something, such as the range of an aircraft, ship, or gun. 3. The distance which can be covered over a hard surface by a ground vehicle, with its rated payload, using the fuel in its tank, and its cans normally carried as part of the ground vehicle equipment. 4. Area equipped for practice in shooting at targets.
- **range of military operations** The armed forces conduct operations in three states of environment: peace, conflict, and war. Stability and support operations are conducted normally during peace and conflict. (See also conflict, military operations other than war (MOOTW), peace operations, and stability and support operations (SASO.) See FMs 100-5, 100-19, 100-20, and 100-23.
- **range probable error** The range error caused by dispersion that will be exceeded as often as not in an infinite number of rounds fired at the same elevation and is one-eighth of the length of the dispersion pattern at its greatest length. The value is given in the firing tables. See FM 6-40.
- **range spread** (JP 1-02) The technique used to place the mean point of impact of two or more units 100 meters apart on the gun-target line. See FM 6-40.
- rate of fire (JP 1-02, NATO) The number of rounds fired per weapon per minute.
- rate of march (JP 1-02, NATO) The average number of miles or kilometers to be traveled in a given period of time, including all ordered halts. It is expressed in miles or kilometers per hour.
- **ready** (JP 1-02, NATO) The term used to indicate that a weapon(s) is loaded, aimed, and prepared to fire.
- **real time** (JP 1-02, NATO) Pertaining to the timeliness of data or information which has been delayed only by the time required for electronic communication. This implies that there are no noticeable delays. (See also near real time.)
- **rear area** (JP 1-02) For any particular command, the area extending forward from its rear boundary to the rear of the area assigned to the next lower level of command. This area is provided primarily for the performance of support functions. (See also brigade support area (BSA) and division support area (DSA).) See FMs 100-5, 101-5, 100-15, and 100-40.
- **rear area operations center (RAOC)/rear tactical operations center** (JP 1-02) A command and control facility that serves as an area/subarea commander's planning, coordinating, monitoring, advising, and directing agency for area security operations.
- **rear area response forces** Forces responsible for rear area threats beyond the capability of base defenses. (See also security operations.)
- rear area threat levels Levels of response to threat activities. (See rear area response forces.) a. level I Threats that can be defeated by base or base cluster self-defense measures. b. level II Threats that are beyond base or base cluster self-defense capabilities but can be defeated by response forces, normally military police, with supporting fires. c. level III Threats that necessitate the command decision to commit a combined arms tactical combat force to defeat them.
- **rear assembly area** (**RAA**) An assembly area occupied by a unit farthest to the unit's rear that normally is within 10 to 15 kilometers of the division forward assembly area and is controlled by the rear command post.

Fire support may be provided to the RAA by either division artillery or the aviation brigade. Units within the RAA secure all routes through their assigned areas. See FMs 1-115 and 71-100-3. 3-10

- **rear boundary** Line that defines the rear of a sector or zone of action assigned to a particular unit. The area behind the rear boundary belongs to the next higher commander and positioning of elements behind it must be coordinated with that commander. (See also boundary.) 3-11
- rear command post (Army) Those staff activities concerned primarily with combat service support (CSS) of the force, administrative support of the headquarters, and other activities not immediately concerned with current operations. Typical representatives within the rear echelon are elements of the G1 and G4 sections, G5, adjutant general, staff judge advocate, inspector general, surgeon, provost marshal, supporting military intelligence elements concerned with counterintelligence and prisoner of war interrogation activities, and the tactical airlift representative of the tactical air control party. Normally rear CPs are near or collocated with CSS units (for example, the COSCOM). (See also command post (CP).)

rear detachment command post — See command post.

- **rear echelon** (JP 1-02, NATO) Elements of a force which are not required in the objective area. (Army) Generic term used to describe all elements normally located in the rear area.
- rear guard (JP 1-02) Security detachment that protects the rear of a column from hostile forces. During a withdrawal, it delays the enemy by armed resistance, destroying bridges, and blocking roads. (Army) 1. The rearmost elements of an advancing or a withdrawing force. It has the following functions: to protect the rear of a column from hostile forces; during the withdrawal, to delay the enemy; during the advance, to keep supply routes open. 2. Security detachment which a moving ground force details to the rear to keep it informed and covered. (See also guard and security operations.)
- **rearming** (JP 1-02) **1.** An operation that replenishes the prescribed stores of ammunition, bombs, and other armament items for an aircraft, naval ship, tank, or armored vehicle, including replacement of defective ordnance equipment, in order to make it ready for combat service. **2.** Resetting the fuze on a bomb, or on an artillery, mortar, or rocket projectile, so that it will detonate at the desired time.
- **rearm, refuel, and resupply point** (**R**³**P**) A designated point through which a unit passes where it receives fuel, ammunition, and other necessary supplies to continue combat operations. See FM 6-50. 3-38
- **rear operations** (Army) Those actions, including area damage control, taken by all units (combat, combat support, combat service support, and host nation), singly or in a combined effort, to secure the force, neutralize or defeat enemy operations in the rear area, and ensure freedom of action in the deep and close-in operations. Rear operations are part of operations in depth.
- **rebuild** (JP 1-02) The restoration of an item to a standard as nearly as possible to its original condition in appearance, performance, and life expectancy. See FMs 100-5 and 100-15.
- **reception** (JP 1-02) **1.** All ground arrangements connected with the delivery and disposition of air or sea drops. Includes selection and preparation of site, signals for warning and approach, facilitation of secure departure of agents, speedy collection of delivered articles, and their prompt removal to storage places having maximum security. When a group is involved, it may be called a reception committee. **2.** Arrangements to welcome and provide secure quarters or transportation for defectors, escapees, evaders, or incoming agents.

- **recoilless rifle** (heavy) (JP 1-02) A weapon capable of being fired from either a ground mount or from a vehicle, and capable of destroying tanks. (Army) A weapon which expels the gases produced by the combustion of the projectile propellant to the rear in order to cause the weapon system and operator to remain relatively stationary. This creates a hazard to the rear of the weapon which must be planned for when the weapon is positioned.
- reconnaissance (recon) (recce) (JP 1-02, NATO) A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. (Army) — 1. An operation designed to obtain information on the enemy, potential enemy, or the characteristics of a particular area. The precursor to all operations, which may be accomplished through passive surveillance, technical means, or human interaction (spies or human intelligence (HUMINT)), or through fighting for information. Forms of reconnaissance include route reconnaissance, zone reconnaissance, area reconnaissance, and reconnaissance in force. 2. NBC reconnaissance may operate with other reconnaissance forces. The NBC reconnaissance uses special equipment to determine the absence or presence and extent of nuclear, chemical, or biological contamination. 3. Engineer reconnaissance may operate with other reconnaissance forces. Engineer reconnaissance focuses on the requirements to clear obstacles or improve routes, fords, bridges, and so forth, to assist in the uninterrupted movement of the main body force. In military operations other than war (MOOTW), the information is used to task assets to improve the state of services, such as to prepare for rubble removal, erect temporary shelter, and provide improved sanitation. See FMs 1-111, 3-19, 6-20, 7-20, 7-30, 17-95, 71-123, 71-100, 100-5, 101-5, and 5-101. **4-9, 4-18**
- **reconnaissance by fire** (JP 1-02, NATO) A method of reconnaissance in which fire is placed on a suspected enemy position to cause the enemy to disclose a presence by movement or return of fire. See FMs 5-36, 71-100-2, 100-5, and 101-5.
- **reconnaissance in force** (JP 1-02, NATO) An offensive operation designed to discover and/or test the enemy's strength or to obtain other information. (Army) A form of reconnaissance operation designed to discover or test the enemy's strength or to obtain other information. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **reconnaissance-pull** Reconnaissance determines which routes are suitable for maneuver, where the enemy is strong and weak, and where gaps exist. Thus, reconnaissance should pull the main body toward and along the path of least resistance. This facilitates the division's initiative and agility. Reconnaissance-pull is also valid in defensive operations. Reconnaissance determines which routes the enemy is using, where the enemy is strong and weak, and where gaps exist. Thus, reconnaissance enhances agility by identifying opportunities and pulling the division along the path of least resistance to mass the division's combat power at the critical time and place. See FM 71-100-2.
- **reconnaissance and surveillance plan** A plan prepared by the G2 or S2, in close coordination with the G3 or S3, that assigns tasks to subordinates to develop information which satisfies the intelligence requirements the commander has established. It will focus assets on the targeted areas of interest and named areas of interest. See FMs 34-10-2, 34-130, and 101-5.
- **reconstitution** Those actions that commanders plan and implement to restore units to a desired level of combat effectiveness commensurate with mission requirements and available resources. Reconstitution operations include regeneration and reorganization. See FMs 63-2, 71-100, 71-100-1/2/3, 100-9, 100-10, and 100-15.

- **reconstitution site** (JP 1-02) A location selected by the surviving command authority as the site at which a damaged or destroyed headquarters can be reformed from survivors of the attack and/or personnel from other sources, predesignated as replacements.
- **recovery operations** Extricating damaged or disabled equipment and moving it to locations where repairs can be made. Recovery is the primary responsibility of the using unit.
- **recovery site** (JP 1-02) In evasion and escape usage, an area from which an evader or an escapee can be evacuated.
- **redeployment** (JP 1-02) The transfer of a unit, an individual, or supplies deployed in one area to another area, or to another location within the area, or to the zone of interior for the purpose of further employment.
- **reduce** 1. A tactical task to gain control over an enemy position or objective. 2. A task to create lanes through or over an obstacle sufficient to allow the attacking force to accomplish its mission.
- **refuel on the move (ROM)** An operation to ensure fuel tanks on combat and fuel-servicing vehicles are full before they arrive in the unit's tactical assembly area. See FM 71-123. 3-39
- **refugee** (JP 1-02) A civilian who, by reason of real or imagined danger, has left home to seek safety elsewhere. See FM 100-20. **D-1**
- **regeneration** Rebuilding of a unit through large-scale replacement of personnel, equipment, and supplies, including the reestablishment or replacement of essential command and control and the conduct of mission essential training for the newly rebuilt unit. See FM 100-9.
- **regimental landing team** (JP 1-02) A task organization for landing comprised of an infantry regiment reinforced by those elements which are required for initiation of its combat function ashore.
- **registration fire** (JP 1-02, NATO) Fire delivered to obtain accurate data for subsequent effective engagement of targets. See FMs 6-series and 7-90.
- **registration point** (JP 1-02, NATO) Terrain feature or other designated point on which fire is adjusted for the purpose of obtaining corrections to firing data.
- **regulated item** (JP 1-02, NATO) Any item whose issue to a user is subject to control by an appropriate authority for reasons that may include cost, scarcity, technical or hazardous nature, or operational significance.
- **rehearsal** The process of practicing a plan before actual execution. Rehearsals assist units in clarifying the scheme of maneuver, synchronizing the battlefield operating systems, orienting subordinates to the positions and actions of other units, and practicing any possible branches and sequels from the decision support matrix. The rehearsal should not be allowed to digress into a war game. If the commander identifies problems with the synchronization, he should direct a rehearsal after the issues are resolved to ensure all participants clearly understand the required actions. (See also backbrief, confirmation brief, and war game.) See FM 101-5
- **reinforce** (**R**) (+) A mission in which one unit augments the capability of another similar-type unit. (See also direct support, general support, and general support-reinforcing.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.

- **reinforcing (R)** (+) (JP 1-02, NATO) In artillery usage, tactical mission in which one artillery unit augments the fire of another artillery unit. (See also direct support (DS), general-support (GS), and general support reinforcing (GSR).) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **reinforcing obstacles** (JP 1-02) Those obstacles specifically constructed, emplaced, or detonated through military effort and designed to strengthen existing terrain to disrupt, fix, turn, or block enemy movement. (See also obstacle.) See FM 90-7.
- **release line (RL)** Phase line used in river-crossing operations that delineates a change in the headquarters controlling movement. 3-20
- **release point (road) (RP)** (JP 1-02) A well-defined point on a route at which the elements composing a column return under the authority of their respective commanders, each one of these elements continuing its movement toward its own appropriate destination. (See also lane, march column, march serial, march unit, route, or start point (SP).) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 55-10, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **relief in place (RIP)** (JP 1-02, NATO) An operation in which, by direction of higher authority, all or part of a unit is replaced in an area by the incoming unit. The responsibilities of the replaced elements for the mission and the assigned zone of operations are transferred to the incoming unit. The incoming unit continues the operation as ordered.
- **religious ministry support** (JP 1-02) The entire spectrum of professional duties to include providing for or facilitating essential religious needs and practices, pastoral care, family support programs, religious education, volunteer and community activities, and programs performed to enhance morale and moral, ethical, and personal well-being. Enlisted religious support personnel assist the chaplain in providing religious ministry support.
- **reorganization** Action taken to shift internal resources within a degraded unit to increase its level of combat effectiveness. See FMs 7-7, 7-8, 7-20 and 100-9.
- **repair** (JP 1-02) The restoration of an item to serviceable condition through correction of a specific failure or unserviceable condition.
- **repeat** (JP 1-02, NATO) In artillery and naval gunfire support, an order or request to fire again the same number of rounds with the same method of fire. See FMs 6-series and 7-90.
- required supply rate (RSR) (ammunition) (JP 1-02) In Army usage, the amount of ammunition expressed in terms of rounds per weapon per day for ammunition items fired by weapons, and in terms of other units of measure per day for bulk allotment and other items, estimated to be required to sustain operations of any designated force without restriction for a specified period. Tactical commanders use this rate to state their requirements for ammunition to support planned tactical operations at specified intervals. The required supply rate is submitted through command channels. It is consolidated at each echelon and is considered by each commander in subsequently determining the controlled supply rate within the command. (See also controlled supply rate (CSR).) See FMs 9-6 and 100-10.
- reserve (JP 1-02) 1. Portion of a body of troops which is kept to the rear, or withheld from action at the beginning of an engagement, available for a decisive movement. 2. Members of the Military Services who are not in active service but who are subject to call to active duty. 3. Portion of an appropriation or contract authorization held or set aside for future operations or contingencies and in respect to which administrative

authorization to incur commitments or obligations has been withheld. (Army) — That portion of a force withheld from action or uncommitted to a specific course of action, so as to be available for commitment at the decisive moment. Its primary purpose is to retain flexibility through offensive action. (See also committed force and uncommitted force.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.

- **reserved demolition target** (JP 1-02, NATO) A target for demolition, the destruction of which must be controlled at a specific level of command because it plays a vital part in the tactical or strategical plan, or because of the importance of the structure itself, or because the demolition may be executed in the face of the enemy. (See also reserved obstacles.) See FM 90-7.
- **reserved obstacles** (JP 1-02) Those demolition obstacles that are deemed critical to the plan for which the authority to detonate is reserved by the designating commander. (Army) Obstacles, of any type, for which the commander restricts execution authority. See FM 90-7.
- **reserved route** (JP 1-02, NATO) In road traffic, a specific route allocated exclusively to an authority or formation. See FM 55-10.
- **residual radioactivity** (JP 1-02) Nuclear radiation that results from radioactive sources and which persist for longer than one minute. Sources of residual radioactivity created by nuclear explosions include fission fragments and radioactive matter created primarily by neutron activation, but also by gamma and other radiation activation. Other possible sources of residual radioactivity include radioactive material created and dispersed by means other than nuclear explosion. (See also contamination, induced radiation (nuclear), and initial nuclear effects.) See FM 100-30, JPs 3-12.3, and 3-12.2.
- **residual risk** The level of risk remaining after controls have been identified and selected for hazards that may result in loss of combat power. Controls are identified and selected until residual risk is at an acceptable level or until it cannot be practically reduced further.
- **response force** (JP 1-02) A mobile force with appropriate fire support designated, usually by the area commander, to deal with Level II threats in the rear area. (Army) Normally a military police function. See FMs 19-1, 71-100, and 100-15.

restoration — The systematic removal of pollution or contaminants from the environment, especially from t

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- restricted operations zone (ROZ) (Army) A volume of airspace of defined dimensions designated for a specific operational mission. Entry into that zone is authorized only by the originating headquarters. See FM 100-103.
- **restrictive fire area** (**RFA**) An area in which specific restrictions are imposed and into which fires that exceed those restrictions may not be delivered without prior coordination with the establishing headquarters. See FM 6-series. 3-22
- restrictive fire line (RFL) A line established between converging friendly forces (one or both may be moving) that prohibits fires or effects from fires across the line without coordination with the affected force. It is established by the next higher common commander of the converging forces. See FMs 7-20, 17-95, 71-100, and 100-15.
- **resupply** (JP 1-02, NATO) The act of replenishing stocks in order to maintain required levels of supply. See FM 100-10.
- **retain** (JP 1-02) When used in the context of deliberate planning, the directed command will keep the referenced operation plan, operation plan in concept format, or concept summary and any associated Joint Operation Planning System or Joint Operation Planning and Execution System automated data processing files in an inactive library or status. The plan and its associated files will not be maintained unless directed by follow-on guidance. (Army) A tactical task to occupy and hold a terrain feature to ensure it is free of enemy occupation or use. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **retirement** (JP 1-02, NATO) An operation in which a force out of contact moves away from the enemy. (Army) A form of retrograde operations; a directed, rearward movement by a force that is not in contact with the enemy and does not anticipate significant contact with the enemy. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.

retrograde — A type of operation in which a unit conducts a directed, organized movement to the rear or

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retrograde movement (JP 1-02) — Any movement of a command to the rear, or away from the enemy. It may be forced by the enemy or may be made voluntarily. Such movements may be classified as withdrawal, retirement, or delaying action. (See also delaying operation.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.

reverse slope — Any slope which descends away from the enemy.

- **revolutionary** (JP 1-02) An individual attempting to effect a social or political change through the use of extreme measures. (See also antiterrorism (AT).) See FM 100-20.
- riot control agent (RCA) (JP 1-02) A substance that produces temporary irritating or disabling physical effects that disappear within minutes of removal from exposure. There is no significant risk of permanent injury, and medical treatment is rarely required. (Army) A compound that produces temporary irritating or incapacitating effects when used in field concentrations. Such compounds include tearing (crying), sneezing, and vomiting agents. See FM 3-9.
- **risk** Chance of hazard or bad consequences; exposure to chance of injury or loss. Risk level is expressed in terms of hazard probability or severity.
- risk assessment The identification and assessment of hazards (first two steps of risk management process).
- **risk decision** The decision to accept or not accept the risk(s) associated with an action; made by the commander, leader, or individual responsible for performing that action.
- **risk management** The process of detecting, assessing, and controlling risk arising from operational factors and making decisions that balance risk costs with mission benefits. The five steps of risk management are identify the hazards, assess the hazards, develop controls and make risk decision, implement controls, and supervise and evaluate. (See controls, exposure, hazard, probablity, residual risk, risk, risk assessment, risk decision, and severity) See FM 1-100.
- **river crossing** An operation required before ground combat power can be projected and sustained across a water obstacle. It is a centrally planned and controlled offensive operation that requires the allocation of external crossing means and a force dedicated to the security of the bridgehead. (See also deliberate crossing and hasty crossing.) See FM 90-13. **3-28**
- **riverine area** (JP 1-02) An inland or coastal area comprising both land and water, characterized by limited land lines of communication, with extensive water surface and/or inland waterways that provide natural routes for surface transportation and communications. See FM 100-40.
- **riverine operations** (JP 1-02) Operations conducted by forces organized to cope with and exploit the unique characteristics of a riverine area, to locate and destroy hostile forces, and/or to achieve, or maintain control of the riverine area. Joint riverine operations combine land, naval, and air operations, as appropriate, and are suited to the nature of the specific riverine area in which operations are to be conducted. See FM 100-40.
- **roadblock** (JP 1-02, NATO) A barrier or obstacle (usually covered by fire) used to block, or limit the movement of, hostile vehicles along a route. See FM 5-102. 3-31, 3-32
- **road clearance time** (JP 1-02, NATO) The total time a column requires to travel over and clear a section of the road. See FMs 55-10 and 55-30.
- **roentgen** (JP 1-02, NATO) A unit of exposure dose of gamma (or X-) radiation. In field dosimetry, one roentgen is essentially equal to one rad. (Army) An obsolete term for a unit of radiation dosage equal to the quantity of ionizing radiation that will produce one electrostatic unit of electricity in one cubic centimeter of dry air at zero degrees Celcius and standard atmospheric pressure. (See also centigray (cGy) and dose rate.) See FM 3-9.

- **rounds complete** (JP 1-02, NATO) In artillery and naval gunfire support, the term used to report that the number of rounds specified in fire for effect have been fired. (See also shot.) See FMs 6-series and 7-90.
- **route** (JP 1-02, NATO) The prescribed course to be traveled from a specific point of origin to a specific destination. See FMs 55-10, 55-30, and 100-103.
- **route capacity** (JP 1-02, NATO) **1.** The maximum traffic flow of vehicles in one direction at the most restricted point on the route. **2.** The maximum number of metric tons which can be moved in one direction over a particular route in one hour. It is the product of the maximum traffic flow and the average payload of the vehicles using the route. See FM 55-10.
- **Toute classification** (JP 1-02, NATO) Classification assigned to a route using factors of minimum width and worst route type; least bridge, raft, or culvert military load classification; and obstructions to traffic flow. (See also military load classification (MLC).) See FMs 5-36 and 17-95.
- **route reconnaissance** A form of reconnaissance focused along a specific line of communications, such as a road, railway, or waterway, to provide new or updated information on route conditions and activities along the route. See FMs 5-36 and 17-95.
- **rules of engagement (ROE)** (JP 1-02) Directives issued by competent military authority which delineate the circumstances and limitations under which US forces will initiate and/or continue combat engagement with other forces encountered. See FM 100-20.
- rules of interaction (ROI) (Army) Rules that guide those human dimension skills required to successfully interface with the myriad of players often present in stability and support operations. These guidelines govern interpersonal communications skills, extent and form of soldier's persuasion, negotiation, and communication techniques. Their purpose is to reduce hostile confrontation. Rules of interaction are founded on firm rules of engagement. Together they provide the soldier a tool to deal with nontraditional threats such as political friction, ideologies, cultural idiosyncrasies, and religious beliefs and rituals. See FM 100-20.
- **rupture** A task to create a gap in enemy defensive positions quickly. (See also breach and reduce.)
- **ruse**(Army) A technique of deception operations designed to deceive the enemy, characterized by deliberately exposing false information to the collection means of the enemy, thereby obtaining an advantage. This can be done by any means, including electronic signals and signatures, dummy positions, dummy vehicles and facilities, or misleading troop and force movements. (See also deception operation.)

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- **sabotage** (JP 1-02) An act or acts with intent to injure, interfere with, or obstruct the national defense of a country by willfully injuring or destroying, or attempting to injure or destroy, any national defense or war material, premises, or utilities, to include human and natural resources. (See also terrorism.) See FMs 19-1 and 100-20.
- **safe area** (JP 1-02) A designated area in hostile territory that offers the evader or escapee a reasonable chance of avoiding capture and of surviving until he can be evacuated.

- safe house (JP 1-02) An innocent-appearing house or premises established by an organization for the purpose of conducting clandestine or covert activity in relative security. See FM 100-20. D-2, D-7
- **salient** A protrusion or bulge in the trace of the forward line of friendly troops toward or into an enemy area of operations or on the outside bend of a river. See FM 100-40.
- salvage (JP 1-02) 1. Property that has some value in excess of its basic material content but which is in such condition that it has no reasonable prospect of use for any purpose as a unit and its repair or rehabilitation for use as a unit is clearly impractical. 2. The saving or rescuing of condemned, discarded, or abandoned property, and of materials contained therein for reuse, refabrication, or scrapping. 4-27
- scatterable mine (JP 1-02, NATO) In land mine warfare, a mine laid without regard to classical pattern and which is designed to be delivered by aircraft, artillery, missile, ground dispenser, or by hand. Once laid, it normally has a limited life. See FM 20-32. 3-30
- **scheduled fire** (JP 1-02, NATO) A type of prearranged fire executed at a predetermined time. See FMs 6-series and 7-90.
- scheduled supplies Requirements that can be reasonably predicted. A scheduled supply normally will not require a requisition to be submitted by the user for its replenishment. Requirements are based on troop strength, equipment density, forecasts, and daily usage factors. Supply classes I, III (bulk), V, and VI normally are treated as scheduled supplies. See FM 100-10.
- scheduled target (JP 1-02, NATO) In artillery and naval gunfire support, a planned target on which fire is to be delivered at a specific time. (See also on-call target.) See FMs 6-series and 7-90.
- schedule of fire (JP 1-02) Groups of fires or series of fires fired in a definite sequence according to a definite program. The time of starting the schedule may be ON CALL. For identification purposes schedules may be referred to by a code name or other designation. See FMs 6-series and 7-90.
- **schedule of targets** (JP 1-02, NATO) In artillery and naval gunfire support, individual targets, groups or series of targets to be fired on, in a definite sequence according to a definite program. See FMs 6-series and 7-90.
- **scheme of maneuver** (JP 1-02) The tactical plan to be executed by a force in order to seize assigned objectives. See FM 101-5.
- scientific and technical intelligence (JP 1-02) The product resulting from the collection, evaluation, analysis, and interpretation of foreign scientific and technical information which covers: **a.** foreign developments in basic and applied research and in applied engineering techniques; and **b.** scientific and technical characteristics, capabilities, and limitations of all foreign military systems, weapons, weapon systems, and materiel, the research and development related thereto, and the production methods employed for their manufacture. See FM 34-2.
- screen (JP 1-02, NATO) 1. An arrangement of ships, aircraft, and/or submarines to protect a main body or convoy. 2. In cartography, a sheet of transparent film, glass, or plastic carrying a "ruling" or other regularly repeated pattern which may be used in conjunction with a mask, either photographically or photomechanically, to produce areas of the pattern. 3. In surveillance, camouflage, and concealment, any natural or artificial material, opaque to surveillance sensor(s), interposed between the sensor(s) and the object to be camouflaged or concealed. 4. A security element whose primary task is to observe, identify and report

- information, and which only fights in self-protection. (Army) A task to maintain surveillance; provide early warning to the main body; or impede, destroy, and harass enemy reconnaissance within its capability without becoming decisively engaged. (See also security operations.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5. C-11
- screen line A control measure, usually named as a phase line (PL), established forward of the main body during defensive operations. Once occupied it becomes the forward line of own troops (FLOT) and the limit of advance (LOA) for all friendly forces although permission can be obtained from the establishing headquarters to go beyond it. (See also screen and security operations.) See FMs 7-30, 17-95, 71-100, and 100-15.
- **seaport** A place at which ships may discharge or receive their cargoes. (See also aerial ports.) See FM 55-10. **4-29**
- **seaport of debarkation (SPOD)** A marine terminal for sustained port operations at which personnel and material are discharged from ships. SPODs normally act as ports of embarkation on return passenger and retrograde cargo shipments.

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- **seaport of embarkation (SPOE)** A marine terminal for sustained port operations at which personnel board and materiel is loaded aboard ships. SPOEs normally act as ports of debarkation on return passenger and retrograde cargo shipments.

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- search and attack A variant of the movement to contact conducted by smaller, light maneuver units and air cavalry or air assault forces in large areas to destroy enemy forces, deny area to the enemy, or collect information. Search and attack operations may be conducted against a dispersed enemy in close terrain unsuitable for armored forces, in rear areas against enemy special operations forces (SOF) or infiltrators, or as an area security mission to clear assigned zones. (See also movement to contact.) See FMs 7-7, 7-10, 7-20, 7-30, 71-100-2, 90-4, and 90-26.
- sector (JP 1-02, NATO) 1. An area designated by boundaries within which a unit operates, and for which it is responsible. 2. One of the subdivisions of a coastal frontier. (Army) Normally, sectors are used in defensive operations and have a forward edge of the battle area designated by a higher commander. (See also area of influence and zone of action.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- **sector of fire** (JP 1-02, NATO) A defined area which is required to be covered by the fire of individual or crew-served weapons or the weapons of a unit. See FMs 7-7, 7-8, 7-91, 17-12, and 23-1.
- **secure** (JP 1-02, NATO) In an operational context, to gain possession of a position or terrain feature, with or without force, and to make such disposition as will prevent, as far as possible, its destruction or loss by enemy action. (Army) A tactical task to gain possession of a position or terrain feature, with or without force, and to deploy in a manner which prevents its destruction or loss to enemy action. The attacking force may or may not have to physically occupy the area. **C-10**
- security (JP 1-02) 1. Measures taken by a military unit, an activity or installation to protect itself against all acts designed to, or that may, impair its effectiveness. 2. A condition that results from the establishment and maintenance of protective measures that ensure a state of inviolability from hostile acts or influences.
 3. With respect to classified matter, it is the condition that prevents unauthorized persons from having access to official information that is safeguarded in the interests of national security. (NATO) A condition that results from the establishment of measures which protect designated information, materiel, personnel,

- systems, components, and equipment against hostile persons, acts, or influences. See FMs 17-95, 71-100, and 100-15.
- security area (zone) Area that begins at the forward area of the battlefield and extends as far to the front and flanks as security forces are deployed. Forces in the security area furnish information on the enemy and delay, deceive, and disrupt the enemy and conduct counterreconnaissance. See FMs 17-95, 71-3, 71-100, and 100-15.
- security assistance (JP 1-02) Group of programs authorized by the Foreign Assistance Act of 1961, as amended, and the Arms Export Control Act of 1976, as amended, or other related statutes by which the United States provides defense articles, military training, and other defense-related services, by grant, loan, credit, or cash sales in furtherance of national policies and objectives. See FM 100-20.
- security operations Those operations designed to provide reaction time, maneuver space, and protection to the main body. Security operations are characterized by aggressive reconnaissance to reduce terrain and enemy unknowns, to gain and maintain contact with the enemy to ensure continuous information, and to provide early and accurate reporting of information to the protected force. Forms of security operations include screen, guard, cover, and area security. Area security operations normally are associated with rear operations. Security operations forces orient on the main body and may be oriented in any direction from a stationary or moving force. (See also screen, guard, cover, and rear area response forces.) See FMs 7-30, 17-95, 71-100, 100-15, and 100-40.
- seize A tactical task to clear a designated area and obtain control of it. (See also contain.) See FM 100-40.
- **selective identification feature (SIF)** (JP 1-02) A capability that, when added to the basic identification friend or foe system, provides the means to transmit, receive, and display selected coded replies. (See also identification, friend or foe (IFF), and IFF on/off line.) See FM 1-111.

selective mobilization — *See* mobilization.

semipermissive environment — *See* operational environment.

- sensor (JP 1-02, NATO) An equipment which detects, and may indicate and/or record objects and activities by means of energy or particles emitted, reflected, or modified by objects. 4-9, 4-20
- **separation zone** (JP 1-02, NATO) An area between two adjacent horizontal or vertical areas into which units are not to proceed unless certain safety measures can be fulfilled. (See also zone of separation (ZOS).) See FM 100-20.
- **sequel** Major operations that follow the current major operation. Plans for these are based on the possible outcomes (victory, stalemate, or defeat) associated with the current operation. See FM 101-5.
- **serial** (JP 1-02, NATO) An element or a group of elements within a series which is given a numerical or alphabetical designation for convenience in planning, scheduling, and control. (Army) A serial can be a group of people, vehicles, equipment, or supplies and is used in airborne, air assault, and amphibious operations. See FMs 55-10, 71-100-3, 90-26, and 100-40.
- serial assignment table (JP 1-02) A table that is used in amphibious operations and shows the serial number, the title of the unit, the approximate number of personnel; the material, vehicles, or equipment in the serial; the number and type of landing craft and/or amphibious vehicles required to boat the serial; and the ship on

- which the serial is embarked. (Army) Also used in airborne and air assault operations and may be used in noncombatant evacuation operations. See FMs 71-100, 71-100-3, and 90-26.
- series of targets (NATO, Army) In fire support, a number of targets and/or group(s) of targets planned in a predetermined time sequence to support a maneuver phase. A series of targets is indicated by a code name or nickname. See FMs 6-series and 7-90. 3-24
- **service ammunition** (JP 1-02) Ammunition intended for combat, rather than for training purposes. See FMs 7-91, 9-6, 17-12, and 23-1.
- Service component command (JP 1-02) A command consisting of the Service component commander and all those Service forces, such as individuals, units, detachments, organizations, and installations under the command including the support forces that have been assigned to a combatant command, or further assigned to a subordinate unified command or joint task force. (See also functional component command.) See FM 100-7 and JP 3-0.
- **severity** The expected consequence of an event in terms of degree of injury, property damage, or other mission-impairing factors (loss of combat power, adverse publicity, and so forth) that could occur.
- **shallow fording** (JP 1-02) The ability of a self-propelled gun or ground vehicle equipped with built-in waterproofing, with its wheels or tracks in contact with the ground, to negotiate a water obstacle without the use of a special waterproofing kit. (See also ford.)
- **shaped charge** (JP 1-02, NATO) A charge shaped so as to concentrate its explosive force in a particular direction. (Army) The high-explosive antitank round is a type of shaped charge. This type charge is used for cutting holes in armor plate or concrete. See FMs 5-series and 9-6.
- **sheaf** (JP 1-02) In artillery and naval gunfire support, planned planes (lines) of fire that produce a desired pattern of bursts with rounds fired by two or more weapons. See FMs 6-series and 7-90.
- **shelling report** (**SHELREP**) (JP 1-02, NATO) Any report of enemy shelling containing information on caliber, direction, time, density and area shelled.
- **shift fire** The command to move the cone of fire in a direction away from a friendly maneuvering force so that enemy forces continue to be struck by the beaten zone at the same time the friendly unit moves. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **shore party** (JP 1-02, NATO) A task organization of the landing force, formed for the purpose of facilitating the landing and movement off the beaches of troops, equipment, and supplies; for the evacuation from the beaches of casualties and enemy prisoners of war; and for facilitating the beaching, retraction, and salvaging of landing ships and craft. It comprises elements of both the naval and landing forces. It is also called beach group. See JP 3-02.1.
- **short** (JP 1-02, NATO) In artillery and naval gunfire support, a spotting, or an observation, used by an observer to indicate that a burst(s) occurred short of the target in relation to the spotting line. (Army) In direct fire, a sensing of a round hitting below the target or between the target and the firing system. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **short-range air defense engagement zone (SHORADEZ)** (JP 1-02) In air defense, that airspace of defined dimensions within which the responsibility for engagement of air threats normally rests with short-range air

- defense weapons. It may be established within a low- or high-altitude missile engagement zone. See FMs 44-100 and 100-103.
- **short round** (JP 1-02) **1.** The unintentional or inadvertent delivery of ordnance on friendly troops, installations, or civilians by a friendly weapon system. **2.** A defective cartridge in which the projectile has been seated too deeply. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **shot** (JP 1-02, NATO) In artillery and naval gunfire support, a report that indicates a gun, or guns, have been fired. (Army) A message sent to the observer to alert him that rounds for his call for fire are in the air and to be prepared to provide a sensing of the relation of their impact to the target. See FMs 6-series and 7-90.
- show of force (JP 1-02) An operation, designed to demonstrate US resolve, that involves increased visibility of US deployed forces in an attempt to defuse a specific situation, which, if allowed to continue, may be detrimental to US interests or national objectives. See also deception.) See FM 100-20.
- **signal operating instruction (SOI)** (Army) Series of orders issued for technical control and coordination of signal support activities of a command.
- **signal security (SIGSEC)** (JP 1-02) A generic term that includes both communications security and electronics security. (Army) Measures intended to deny or counter hostile exploitation of electronic missions. SIGSEC includes communications security and electronic security. (See also security).
- signals intelligence (SIGINT) (JP 1-02) 1. A category of intelligence comprising either individually or in combination all communications intelligence, electronics intelligence, and foreign instrumentation signals intelligence, however transmitted. 2. Intelligence derived from communications, electronics, and foreign instrumentation signals. See FM 34-2.
- **signature** The visible or audible effects produced when a weapon is fired or a piece of equipment operated, such as noise, smoke, flame, heat, or debris; also, an electronic emission subject to detection and traceable to the equipment producing it.
- **simplicity** One of the nine principles of war. The preparation and execution of clear, uncomplicated, and concise orders and plans to facilitate mission execution in the stress, fatigue, and fog of war. See FM 100-5.
- **simulative electromagnetic deception** Actions to simulate friendly, notional, or actual capabilities to mislead hostile forces. (See also electromagnetic deception, imitative electromagnetic deception, and manipulative electromagnetic deception.)
- **simultaneous attack in depth** Concurrent firing on or attack of enemy reserves, logistics, headquarters, staging and assembly areas, airfields, and close forces (attacking or defending) by maneuver, fire support, and other combat support units in the close fight and fighting in depth with cannon artillery, rocket or missile artillery (land- and sea-based), attack helicopters, airborne forces, air assault forces, other maneuver and combat support forces, special operations forces, and fighter or bomber aircraft to create a synergistic and paralyzing effect on the enemy. See FMs 71-100, 100-5, and 100-15.
- **situational obstacle** An obstacle that a unit plans and possibly prepares prior to starting an operation, but does not execute unless specific criteria are met. It provides the commander flexibility for emplacing tactical obstacles based on battlefield development. See FM 90-7.

- **situation template** A series of projections that portray, based on enemy doctrine, the most probable disposition and location of enemy forces within constraints imposed by weather and terrain. See FMs 34-130 and 101-5.
- **situation map** (**SITMAP**) (JP 1-02, NATO) A map showing the tactical or the administrative situation at a particular time. (See also map and overlay.) See FM 101-5.
- **situation report (SITREP)** (JP 1-02, NATO) A report giving the situation in the area of a reporting unit or formation. (Army) The format is usually established by unit standard operating procedures.
- **skin decontamination technique** Process of removing or neutralizing contamination on the skin within one minute of exposure to prevent it from penetrating into the skin. Immediate decontamination techniques are skin decontamination, personal wipedown, and operator's spraydown. See FM 3-5.
- slice (JP 1-02) An average logistic planning factor used to obtain estimates of requirements for personnel and materiel. A personnel slice, e.g., generally consists of the total strength of the stated basic combatant elements, plus its proportionate share of all supporting and higher headquarters personnel. (Army) The normal apportionment of combat support and combat service support elements allocated to support a maneuver unit. (See also combat multiplier.)
- **small-scale map** *See* map.
- smoke blanket A dense horizontal concentration of smoke covering an area of ground with visibility inside the concentration less than 50 meters. The blanket is established over and around friendly areas to protect them from air visual observation and visual precision bombing attacks or established over enemy areas to protect attacking friendly aircraft from enemy air defense. See FM 3-50.
- **smoke curtain** A vertical smoke screen. (See also smoke screen.) See FM 3-50. 3-24
- **smoke haze** A light concentration that restricts accurate enemy observation and fire but which is not dense enough to hamper friendly operations (visibility 50 to 150 meters). See FM 3-50. 3-24
- **smoke screen** (JP 1-02, NATO) Cloud of smoke used to mask either friendly or enemy installations or maneuvers. (Army) The smoke screen is used to conceal ground maneuver, obstacle breaching, recovery operations, amphibious assault operations, as well as key assembly areas, supply routes, and logistical facilities. See FM 3-50. **3-24**
- **solid waste** Any material or substance (solid or liquid) which is inherently waste-like by being no longer suitable for its originally intended purpose.
- sortie (JP 1-02, NATO) In air operations, an operational flight by one aircraft.
- **space defense** (JP 1-02) All defensive measures designed to destroy attacking enemy vehicles (including missiles) while in space, or to nullify or reduce the effectiveness of such attack.
- space operations The employment of space system capabilities that provide the means to enhance command and control, facilitate the maneuver of forces, reduce the commander's uncertainty, and improve fire support, air defense, intelligence collection, and combat service support operations which will support strategic, operational, and tactical missions across the operational continuum in the near, mid, and far term. See FM 100-5.

- **special activities** (JP 1-02) Activities conducted in support of national foreign policy objectives which are planned and executed so that the role of the US Government is not apparent or acknowledged publicly. They are also functions in support of such activities but are not intended to influence United States political processes, public opinion, policies, or media and do not include diplomatic activities or the collection and production of intelligence or related support functions.
- **special air operation** (JP 1-02) An air operation conducted in support of special operations and other clandestine, covert, and psychological activities. See FM 100-25.
- **special forces operations base (SFOB)** (Army) A base formed and operated by the special forces group from organic and attached resources. It is the focal point for operational, administrative, logistical, and communication support functions. See FM 100-25.
- **special operations (SO)** (JP 1-02) Operations conducted by specially organized, trained, and equipped military and paramilitary forces to achieve military, political, economic, or psychological objectives by unconventional military means in hostile, denied, or politically sensitive areas. These operations are conducted during peacetime competition, conflict, and war, independently or in coordination with operations of conventional, nonspecial operations forces. Political-military considerations frequently shape special operations, requiring clandestine, covert, or low visibility techniques and oversight at the national level. Special operations differ from conventional operations in degree of physical and political risk, operational techniques, mode of employment, independence from friendly support, and dependence on detailed operational intelligence and indigenous assets. See FM 100-25.
- **special operations-peculiar** (Army) Materiel, services, and training for special operations mission support for which there is no broad conventional requirement. See FM 100-25.
- special operations forces (SOF) (JP 1-02) Those active and reserve component forces of the Military Services designated by the Secretary of Defense and specifically organized, trained, and equipped to conduct and support special operations. 4-29, 4-30
- special reconnaissance (Army) Complementing of national and theater intelligence collection assets and systems by obtaining specific, well-defined, and time-sensitive information of strategic or operational significance. It may complement other collection methods where there are constraints of weather, terrain-masking, hostile countermeasures, and/or other systems availability. Special reconnaissance is a human intelligence function that places US or US-controlled "eyes on target" in hostile, denied, or politically sensitive territory when authorized. SOF may conduct these missions unilaterally or in support of conventional operations. See JP 3-05.
- **special staff** (JP 1-02) All staff officers having duties at a headquarters and not included in the general (coordinating) staff group or in the personal staff group. The special staff includes certain technical specialists and heads of services, for example, quartermaster officer, antiaircraft officer, transportation officer, etc. See FM 101-5.
- specified command (JP 1-02) A command that has a broad, continuing mission, normally functional, and is established and so designated by the President through the Secretary of Defense with the advice and assistance of the Chairman of the Joint Chiefs of Staff. It normally is composed of forces from a single Military Department. Also called specified combatant command. See FM 100-5 and JP 5-0.

- **splash** (JP 1-02, NATO) **1.** In artillery and naval gunfire support, word transmitted to an observer or spotter five seconds before the estimated time of the impact of a salvo or round. **2.** In air interception, target destruction verified by visual or radar means. (See also shot and fire mission.) See FMs 6-series and 7-90.
- **split-based operation** The dividing of logistics, staff, and management and command functions so that only those functions absolutely necessary are deployed, allowing some logistics, staff, and management and command functions to be accomplished from CONUS or another theater. See FMs 100-7 and 100-10.
- **spoiling attack** (JP 1-02) A tactical maneuver employed to seriously impair a hostile attack while the enemy is in the process of forming or assembling for an attack. Usually employed by armored units in defense by an attack on enemy assembly positions in front of a main line of resistance or battle position. (Army) A type of attack executed from a defensive posture to seriously impair a hostile attack by striking the enemy when he is preparing for his own attack and is vulnerable in assembly areas and attack positions. (See also attack.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **spore** An asexual, usually single-celled, reproductive body of plants such as fungi, mosses, and ferns; a microorganism, as a bacterium, in a resting or dormant state. See FM 3-9.
- **spot jamming** (JP 1-02, NATO) The jamming of a specific channel or frequency. (See also jamming.) See FM 34-2.
- **spot report (SPOTREP)** (JP 1-02) A concise narrative report of essential information covering events or conditions that may have an immediate and significant effect on current planning and operations that is afforded the most expeditious means of transmission consistent with requisite security. (Note: In reconnaissance and surveillance usage, spot report is not to be used.) (Army) The format is usually established by unit standard operating procedures.
- **stability and support operations** (Army) The use of military capabilities for any purpose other than war. (See also counterdrug, counterinsurgency, domestic emergencies, humanitarian assistance (HA), military operations other than war (MOOTW), and peace operations.) See JP 3-07 and FM 100-20.
- **staff estimates** (JP 1-02) Assessments of courses of action by the various staff elements of a command that serve as the foundation of the commander's estimate. (Army) The staff officer's evaluation of how factors in his particular field of interest will influence the courses of action under consideration by the commander. (See also commander's estimate of the situation.) See FM 101-5.
- staging area (JP 1-02, NATO) 1. Amphibious or airborne A general locality between the mounting area and the objective of an amphibious or airborne expedition, through which the expedition or parts thereof pass after mounting, for refueling, regrouping of ships, and/or exercise, inspection, and redistribution of troops. 2. Other movements A general locality established for the concentration of troop units and transient personnel between movements over the lines of communications. See FMs 55-10 and 55-30.
- staging base (JP 1-02) 1. An advanced naval base for the anchoring, fueling, and refitting of transports and cargo ships, and for replenishing mobile service squadrons. 2. A landing and takeoff area with minimum servicing, supply, and shelter provided for the temporary occupancy of military aircraft during the course of movement from one location to another.
- **staging field** A predetermined area where aircraft assemble prior to conducting an air assault operation.

- **staging plan** An air assault operation plan that is based on the loading plan and prescribes the arrival time of the ground units (troops, equipment, and supplies) at the pickup zone in the proper order for movement. See FM 90-4.
- **standard pattern** (JP 1-02, NATO) In landmine warfare, the agreed pattern to which mines are normally laid. See FMs 5-34, 5-102, and 20-32.
- **standard use Army aircraft flight route (SAAFR)** (JP 1-02) Routes established below the coordinating altitude to facilitate the movement of Army aviation assets. Routes are normally located in the corps through brigade rear areas of operation and do not require approval by the airspace control authority. (See airspace control measures.) See FM 100-103. 3-5
- **standing operating procedure (SOP)** (JP 1-02, NATO) A set of instructions covering those features of operations which lend themselves to a definite or standardized procedure without loss of effectiveness. The procedure is applicable unless ordered otherwise. See FM 101-5.
- start point (SP) (NATO, Army) A well-defined point on a route at which a movement of vehicles begins to be under the control of the commander of this movement. It is at this point that the column is formed by the successive passing, at an appointed time, of each of the elements composing the column. In addition to the principal start point of a column there may be secondary start points for its different elements. (See also release point (RP).) See FM 55-30.
- state of readiness (JP 1-02) state 1 (safe) The state of a demolition target upon or within which the demolition charge has been placed and secured. The firing or initiating circuits have been installed, but not connected to the demolition charge. Detonators or initiators have not been connected nor installed. (JP 1-02, NATO) state 2 (armed) The state of a demolition target in which the demolition charges are in place, the firing and priming circuits are installed and complete, ready for immediate firing. See FM 5-102.
- status-of-forces agreement (SOFA) (JP 1-02) An agreement which defines the legal position of a visiting military force deployed in the territory of a friendly state. Agreements delineating the status of visiting military forces may be bilateral or multilateral. Provisions pertaining to the status of visiting forces may be set forth in a separate agreement, or they may form a part of a more comprehensive agreement. These provisions describe how the authorities of a visiting force may control members of that force and the amenability of the force or its members to the local law or to the authority of local officials. To the extent that agreements delineate matters affecting the relations between a military force and civilian authorities and population, they may be considered as civil affairs agreements. (See also stability and support operations (SASO).) See FM 100-20.
- **stay behind force** (JP 1-02, NATO) A force which is left in position to conduct a specified mission when the remainder of the force withdraws or retires from the area. See FMs 17-95 and 71-100.
- **stick** (air transport) (JP 1-02) A number of paratroopers who jump from one aperture or door of an aircraft during one run over a drop zone. See FM 90-26.
- **stowage plan** (JP 1-02) A completed stowage diagram showing what materiel has been loaded and its stowage location in each hold, between-deck compartment, or other space in a ship, including deck space. Each port of discharge is indicated by colors or other appropriate means. Deck and between-deck cargo normally is shown in perspective, while cargo stowed in the lower hold is shown in profile, except that vehicles usually are shown in perspective regardless of stowage.

- **straggler** (JP 1-02, NATO) Any personnel, vehicles, ships, or aircraft which, without apparent purpose or assigned mission, become separated from their unit, column or formation.
- **straggler control** Operations conducted to regulate friendly forces who have become separated from their commands by events on the battlefield.
- **strategic air transport operations** (JP 1-02, NATO) The carriage of passengers and cargo between theaters by means of: **a.** scheduled service; **b.** special flight; **c.** air logistic support; **d.** aeromedical evacuation. See FMs 8-10-6, 100-5, and 100-15.
- **strategic intelligence** (JP 1-02) Intelligence that is required for the formulation of military strategy, policy, and plans and operations at national and theater levels. (See also intelligence.) See FM 100-5.
- strategic level of war (JP 1-02) The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, and develops and uses national resources to accomplish these objectives. Activities at this level establish national and multinational military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of national power; develop global plans or theater war plans to achieve these objectives; and provide military forces and other capabilities in accordance with strategic plans. (See also operational level of war and tactical level of war.) See FM 100-5.
- **strategic mobility** (JP 1-02) The capability to deploy and sustain military forces worldwide in support of national strategy.
- strategic operating systems The functions and subfunctions that describe the activities performed within a theater by unified, joint, or combined forces. The eight operating systems are theater force requirements and readiness, alliance and regional relations, theater strategic intelligence, theater strategic direction and integration, intra-theater strategic deployment and maneuver, theater strategic fires, theater strategic protection, and theater strategic sustainment.
- **strategic psychological activities** (JP 1-02, NATO) Planned psychological activities in peace and war which normally pursue objectives to gain the support and cooperation of friendly and neutral countries and to reduce the will and the capacity of hostile or potentially hostile countries to wage war.
- **strategy** (JP 1-02) The art and science of developing and using political, economic, psychological, and military forces as necessary during peace and war, to afford the maximum support to policies, in order to increase the probabilities and favorable consequences of victory and to lessen the chances of defeat.
- **striking force** A committed force organized to conduct the decisive attack in a mobile defense. It normally comprises the maximum combat power available to the commander at the time of the attack.
- **STRIKWARN** A message transmitted to give advance warning of a friendly nuclear attack to ensure friendly forces can protect themselves from the effects of the attack.
- strong point (SP) (JP 1-02, NATO) A key point in a defensive position, usually strongly fortified and heavily armed with automatic weapons, around which other positions are grouped for its protection. (Army) A position requiring extensive engineer effort for obstacles and survivability positions and positioned to control or block an avenue of approach. Normally, command and control, aid stations, and critical supply stockpiles will be dug in with overhead protection. Trenches and other protective construction will be done to protect soldiers and weapons from damage during assault by mounted and dismounted forces. (See also battle

- position (BP) and mobile defense.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, 100-40, and 101-5. 3-9 3-33
- **subsequent operations phase** The phase of an airborne, air assault, or amphibious operation conducted after the assault phase. Operations in the objective area may consist of offense, defense, linkup, or withdrawal. (See also air movement, assault phase, and mounting phase.)
- **subsequent position** A planned and, to some extent, prepared location for defense or delay that is behind (away from the enemy) the primary positions initially occupied for a defense. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **subversion** (JP 1-02) Action designed to undermine the military, economic, psychological, or political strength or morale of a regime. (See also unconventional warfare (UW).) See FM 100-20.
- **successive positions** Defensive fighting positions located one after another on the battlefield. A force can conduct a delaying action or defense from successive positions. (See also defend and delaying operation.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **supervised route** (JP 1-02, NATO) In road traffic, a roadway over which limited control is exercised by means of traffic control posts, traffic patrols, or both. Movement authorization is required for its use by a column of vehicles or a vehicle of exceptional size or weight. See FMs 55-10 and 55-30.
- **supplementary position** That location which provides the best sectors of fire and defensive terrain along an avenue of approach other than the primary avenue the enemy is expected to attack along, for example, a flank avenue of approach. (See also alternate position, battle position, position (BP), and successive positions.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **supply control** (JP 1-02) The process by which an item of supply is controlled within the supply system, including requisitioning, receipt, storage, stock control, shipment, disposition, identification, and accounting.
- **supply discipline** Command responsibility to identify and redistribute excess materiels, observe senior commander's priorities, and ensure subordinates operate within the legal boundaries of the logistics system.
- supply point (JP 1-02, NATO) Any point where supplies are issued in detail. (Army) A location where supplies, services, and materiels are located and issued. These locations are temporary and mobile, normally being occupied for up to 72 hours.
- **supply point distribution** A method of distributing supplies to the receiving unit at a supply point, railhead, or truckhead. The unit then moves the supplies to its own area using its own transportation.
- **supply site** A location where supplies, services, and materiels are located or stored in a permanent or semipermanent facility.
- support (JP 1-02) 1. The action of a force which aids, protects, complements, or sustains another force in accordance with a directive requiring such action.
 2. A unit which helps another unit in battle. Aviation, artillery, or naval gunfire may be used as a support for infantry.
 3. A part of any unit held back at the beginning of an attack as a reserve.
 4. An element of a command which assists, protects, or supplies other forces in combat. (See also common servicing, direct support (DS), and general support (GS).)

- **support area** A designated area in which combat service support elements and some staff elements locate to support a unit. (See also brigade support area (BSA) and division support area (DSA).) 3-39
- support by fire A tactical task in which a maneuver element moves to a position on the battlefield where it can engage the enemy by direct fire to support a maneuvering force by either support by fire by overwatching or by establishing a base of fire. The maneuver element does not attempt to maneuver to capture enemy forces or terrain. (See also attack by fire and overwatch.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5. 3-18 C-11
- **support force** Those forces charged with providing intense direct overwatching fires to the assault and breaching forces or a force that supports a river crossing and other combat operations. (See also breach force.)
- **supporting arms** (JP 1-02) Air, sea, and land weapons of all types employed to support ground units.
- **supporting attack** (JP 1-02, NATO) An offensive operation carried out in conjunction with a main attack and designed to achieve one or more of the following: deceive the enemy; destroy or pin down enemy forces which could interfere with the main attack; control ground whose occupation by the enemy will hinder the main attack; or force the enemy to commit reserves prematurely or in an indecisive area. (See also main attack.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **supporting distance** Distance between two units that can be traveled in time for one to come to the aid of the other. For small units, it is the distance between two units that can be covered effectively by their fires.
- **supporting effort** The unit, battle position, sector, zone, axis, avenue of approach, area of operations, theater of operations, and so forth, whose purpose supports the success of the main effort. The supporting effort, either directly or indirectly, creates a necessary condition for the main effort to succeed. The higher commander will use other operations, such as economy of force, deep operations, interdiction, deception operations (feints and demonstrations), counterattacks, and supporting attacks as part of the supporting effort. (See also economy of force, main attack, main effort, and supporting attack. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- **supporting forces** (JP 1-02) Forces stationed in, or to be deployed to, an area of operations to provide support for the execution of an operation order. Combatant command (command authority) of supporting forces is not passed to the supported commander.
- **suppression** (JP 1-02) Temporary or transient degradation by an opposing force of the performance of a weapons system below the level needed to fulfill its mission objectives. (Army) A tactical task to employ direct or indirect fires, electronic attack, or smoke on enemy personnel, weapons, or equipment to prevent or degrade enemy fires and observation of the friendly forces. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- suppression of enemy air defenses (SEAD) (JP 1-02) That activity which neutralizes, destroys, or temporarily degrades surface-based enemy air defenses by destructive and/or disruptive means. (Army) The Army has primary responsibility for suppressing ground-based enemy air defense weapons to the limits of observed fire. The United States Air Force (USAF) has responsibility from beyond the limits of observed fire out to the range limits of Army weapons systems; the Army, secondary responsibility. Even if the USAF can target or observe, the Army may still have to attack the target. Beyond the range limits of Army weapons, the USAF is responsible. (See also suppression.) See FM 6-series. (Army) campaign SEAD

- SEAD operations that are preplanned, theaterwide efforts conducted concurrently over an extended period against air defense systems normally located well behind enemy lines. **complementary SEAD** SEAD operations that involve continuously seeking enemy air defense system targets to destroy them. **localized SEAD** SEAD operations that support tactical air operations, Army aviation operations, reconnaissance, and the establishment of corridors for Air Force and Army assets.
- **surprise** One of the nine principles of war. The enemy is attacked at a time or place, or in a manner for which he is unprepared and which he did not expect. See FM 100-5.
- **surveillance** (JP 1-02, NATO) The systematic observation of aerospace, surface or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means. (Army) This includes the use of special NBC and air defense equipment. (See also sensor.)
- survey 1. The act of determining a precise location with various instruments. 2. The directed effort to determine the location and the nature of contamination within an area. See FMs 3-3 and 3-19. 3. The element of an artillery unit which determines an exact location and marks it as a point of reference for laying in the artillery unit. See FMs 6-series and 7-90.
- survivability 1. Includes all aspects of protecting personnel, weapons, and supplies while simultaneously deceiving the enemy. 2. Encompasses planning and locating position sites, designing adequate overhead cover, analyzing terrain conditions and construction materials, selecting excavation methods, and countering the effects of direct and indirect fire weapons. See FM 5-103. 3-33
- survivability operations The development and construction of protective positions such as earth berms, dug-in positions, overhead protection, and countersurveillance means to reduce the effectiveness of enemy weapon systems. See FM 5-103.
- **survival, evasion, resistance, and escape** (**SERE**) Training and actions taken by military members to assist them in surviving in hostile environments, resisting enemy activities, escaping enemy forces, and evading enemy forces until the individual or unit can be reunited with friendly forces. See FM 1-111.
- **suspect** (JP 1-02) In counterdrug operations, a track of interest where correlating information actually ties the track of interest to alleged illegal drug operations. See FM 100-20.
- sustained rate of fire (JP 1-02, NATO) Actual rate of fire that a weapon can continue to deliver for an indefinite length of time without seriously overheating. (Army) Or without doing other mechanical damage to the weapon or weapon system. (See also maximum rate of fire.) See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **sustainment** (JP 1-02) The provision of personnel, logistic, and other support required to maintain and prolong operations or combat until successful accomplishment or revision of the mission or of the national objective.
- **sweep jamming** (JP 1-02, NATO) A narrow band of jamming that is swept back and forth over a relatively wide operating band of frequencies.
- synchronization (JP 1-02) 1. The arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time. 2. In the intelligence context, application of intelligence sources and methods in concert with the operational plan. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, 100-40, and 101-5.

synchronization matrix — A format for the staff to record the results of wargaming and synchronize the course of action (COA) across time, space, and purpose in relation to the enemy's most likely COA. The staff can readily translate a synchronization matrix into a graphic decision-making product such as a decision support matrix. Each battlefield operating system can develop its own synchronization matrix for more detail on specific tasks. See FM 101-5.

Т

- **tactical air control party** (**TACP**) (JP 1-02, NATO) A subordinate operational component of a tactical air control system designed to provide air liaison to land forces and for the control of aircraft.
- tactical air liaison officer (TALO) (Army) An Air Force officer who works at the division or higher rear command post G4 section and facilitates the coordination of cargo aircraft. He maintains information on runway availability, cargo handling capability, and the location of brigade medical treatment facilities and landing areas. See FMs 71-100-1/2/3 and 100-15.
- tactical air operation (JP 1-02) An air operation involving the employment of air power in coordination with ground or naval forces to:
 a. gain and maintain air superiority;
 b. prevent movement of enemy forces into and within the objective area and to seek out and destroy these forces and their supporting installations; and
 c. join with ground or naval forces in operations within the objective area, in order to assist directly in attainment of their immediate objective. (See also air interdiction (AI), allocation, apportionment, close air support (CAS), and counterair.)

tactical air reconnaissance — *See* air reconnaissance.

- where a TBM most likely will strike the ground. This area varies in size based on the known or suspected accuracy of the TBM if it functions normally. (See also theater missile defense (TMD).) See FM 44-100.
- tactical combat force (TCF) (JP 1-02) A combat unit, with appropriate combat support and combat service support assets, that is assigned the mission of defeating Level III threats. (See also rear area response forces.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, and 101-5.
- tactical command post (TAC CP) The forward echelon of a headquarters. The TAC CP consists of representatives from G/S2, G/S3, fire support, tactical air control party, air defense artillery engineers, and combat service support liaison (G/S1, G/S4) elements. It is located well forward on the battlefield so that the commander is near subordinate commanders and can directly influence operations. At division level, the TAC CP is normally located within FM radio range of the committed brigades. (See also command post (CP).) See FM 101-5. A-3
- tactical control (TACON) (JP 1-02) Command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned. Tactical control is inherent in operational control. Tactical control may be delegated to, and exercised at any level at or below the level of combatant command. (Army) Tactical control allows commanders below combatant command level to apply force and direct the tactical use of logistics assets but does not provide authority to change organizational structure or direct administrative and logistical support. See FMs 1-111, 31-20, 71-100, 100-15, and 101-5.

- **tactical intelligence** (JP 1-02) Intelligence that is required for planning and conducting tactical operations. (See also intelligence and combat intelligence.) See FM 34-1, 34-2, 34-3, and 34-130.
- tactical level of war (JP 1-02) The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives.
- tactical minefield (JP 1-02, NATO) A minefield which is part of a formation obstacle plan and is laid to delay, channel, or break up an enemy advance (Army) Minefield employed to directly attack enemy maneuver and to give the defending element a positional advantage over the attacker. See FM 20-32.
- **tactical movement** A movement or maneuver to contact with the enemy or during which contact is anticipated. In a tactical movement, elements are organized to facilitate combat. (See also administrative movement.) See FM 100-15.
- **tactical obstacles** (JP 1-02) Those obstacles employed to disrupt enemy formations, to turn them into a desired area, to fix them in position under direct and indirect fires, and to block enemy penetrations. (See also obstacle.)
- **tactical road march** A rapid movement used to relocate units within a combat zone in order to prepare for combat operations. Although contact with enemy ground forces is not anticipated, security against air attack, enemy special forces, and sympathizers is maintained and the unit is prepared to take immediate action against an enemy threat. (See also march column, march serial, and march unit.) See FMs 7-20, 7-30, 17-95, 55-30, 71-100, 71-123, 100-15, 100-40, and 101-5.
- tactical task The specific activity to be performed by the unit while conducting a form of tactical operation or a choice of maneuver. It is the minimum essential effects to accomplish the purpose. (See also mission statement and operation order (OPORD).) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-5, 100-15, and 101-5.
- tactics (JP 1-02) 1. The employment of units in combat. 2. The ordered arrangement and maneuver of units in relation to each other and/or to the enemy in order to use their full potentialities. (Army) tactics, techniques, and procedures (TTP) 1. Tactics the art and science of employing available means to win battles and engagements. 2. Techniques the methods used by troops and/or commanders to perform assigned missions and functions, specifically, the method of employing equipment and personnel.

 3. Procedures the standard and detailed courses of action that describe how to perform a task. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- tailor To task-organize forces for the accomplishment of a specific mission.
- tanker airlift control element (TALCE) (JP 1-02) A mobile command and control organization deployed to support strategic and theater air mobility operations at fixed, en route, and deployed locations where air mobility operational support is nonexistent or insufficient. The Tanker Airlift Control Element provides on-site management of air mobility airfield operations to include command and control, communications, aerial

- port services, maintenance, security, transportation, weather, intelligence, and other support functions, as necessary. The Tanker Airlift Control Element is composed of mission support elements from various units and deploys in support of peacetime, contingency, and emergency relief operations on both planned and "no notice" basis. See FMs 55-12, 71-100, 71-100-2, 71-100-3, 90-26, and 100-15.
- target (JP 1-02) 1. A geographical area, complex, or installation planned for capture or destruction by military forces. 2. In intelligence usage, a country, area, installation, agency, or person against which intelligence operations are directed. 3. An area designated and numbered for future firing. 3-22

 3-24

 4. In gunfire support usage, an impact burst which hits the target. (NATO) In radar, any discrete object which reflects or retransmits energy back to the radar equipment, or the object of a radar search or surveillance. See FM 44-100. (Army) An object, vehicle, individual, and so forth, which is the aiming point of any weapon or weapon system. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **target acquisition** (JP 1-02, NATO) The detection, identification, and location of a target in sufficient detail to permit the effective employment of weapons. (See also target analysis.) See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **target analysis** (JP 1-02, NATO) An examination of potential targets to determine military importance, priority of attack, and weapons required to obtain a desired level of damage or casualties. (See also target acquisition.)
- **target array** (JP 1-02) A graphic representation of enemy forces, personnel, and facilities in a specific situation, accompanied by a target analysis.
- **target box** Areas designated on identifiable terrain in which enemy targets are expected to appear and against which air support will be employed. See FMs 6-series and 7-90.
- **target concentration** (JP 1-02, NATO) A grouping of geographically proximate targets. (See also target and group of targets.)
- targeted area of interest (TAI) The geographical area or point along a mobility corridor where successful interdiction will cause the enemy to either abandon a particular course of action or require him to use specialized engineer support to continue, where he can be acquired and engaged by friendly forces. Not all TAIs will form part of the friendly course of action; only TAIs associated with high-payoff targets are of interest to the staff. These are identified during staff planning and wargaming. TAIs differ from engagement areas in degree. Engagement areas plan for the use of all available weapons; TAIs might be engaged by a single weapon. See FM 34-130. 3-20
- **targeting** (JP 1-02) **1.** The process of selecting targets and matching the appropriate response to them, taking account of operational requirements and capabilities. **2.** The analysis of enemy situations relative to the commander's mission, objectives, and capabilities at the commander's disposal, to identify and nominate specific vulnerabilities that, if exploited, will accomplish the commander's purpose through delaying, disrupting, disabling, or destroying enemy forces or resources critical to the enemy. See FM 6-20-10.
- **target list** (JP 1-02) The listing of targets maintained and promulgated by the senior echelon of command; it contains those targets that are to be engaged by supporting arms, as distinguished from a "list of targets" that may be maintained by any echelon as confirmed, suspected, or possible targets for informational and planning purposes. See FM 6-series and 7-90.

- target of opportunity (JP 1-02) 1. A target visible to a surface or air sensor or observer which is within range of available weapons and against which fire has not been scheduled or requested. 2. nuclear A nuclear target observed or detected after an operation begins that has not been previously considered, analyzed, or planned for a nuclear strike. Generally fleeting in nature, it should be attacked as soon as possible within the time limitations imposed for coordination and warning of friendly troops and aircraft. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.
- **target-oriented method** A method of nuclear analysis used when detailed target information is available. It gives the best estimate of the effects that the weapon will probably have on the target. See JPs 3-12.2 and 3-12.3.
- target overlay (JP 1-02, NATO) A transparent sheet which, when superimposed on a particular chart, map, drawing, tracing or other representation, depicts target locations and designations. The target overlay may also show boundaries between maneuver elements, objectives, and friendly forward dispositions. See FMs 6-series and 101-5.
- target reference point (TRP) An easily recognizable point on the ground (either natural or man-made) used to initiate, distribute, and control fires. TRPs are designated by maneuver leaders from platoon through battalion to define battalion, company, platoon, section, squad, or individual sectors of fire and observation usually within an engagement area. TRPs can also designate the center of an area where the commander plans to distribute or converge the fires of all his weapons rapidly. TRPs are designated using the standard target symbol and numbers issued by maneuver commanders. Once approved by the battalion fire support officer, TRPs can be designated as indirect fire targets using the standard target symbol with letters and numbers issued by the fire support officer. (See also engagement area (EA), principal direction of fire (PDF), and sector of fire.) See FMs 6-series, 7-7, 7-8, 7-10, 7-20, 7-90, 7-91, 17-12, 17-15, 17-9 and 23-1.
- **target signature** (JP 1-02, NATO) **1.** The characteristic pattern of a target displayed by detection and identification equipment. **2.** In naval mine warfare, the variation in the influence field produced by the passage of a ship or sweep.
- task force (TF) (JP 1-02, NATO) 1. A temporary grouping of units, under one commander, formed for the purpose of carrying out a specific operation or mission. 2. Semipermanent organization of units, under one commander, formed for the purpose of carrying out a continuing specific task. 3. (Army) A battalion-sized unit of the combat arms consisting of a battalion control headquarters, with at least one of its major organic subordinate elements (a company), and the attachment of at least one company-sized element of another combat or combat support arm. (See also task organization.) A component of a fleet organized by the commander of a task fleet or higher authority for the accomplishment of a specific task or tasks. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- task organization (JP 1-02) 1. In the Navy, an organization which assigns to responsible commanders the means with which to accomplish their assigned tasks in any planned action. 2. An organization table pertaining to a specific naval directive. (Army) A temporary grouping of forces designed to accomplish a particular mission. It is the process of allocating available assets to subordinate commanders and (establishing) determining their command and support relationships. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **technical control (TECHCON)** The authority a controlling element has to control all technical aspects of other unit operations.

- **technical intelligence (TECHINT)** (JP 1-02) Intelligence derived from exploitation of foreign materiel, produced for strategic, operational, and tactical level commanders. Technical intelligence begins when an individual service member finds something new on the battlefield and takes the proper steps to report it. The item is then exploited at succeedingly higher levels until a countermeasure is produced to neutralize the adversary's technological advantage. (See also intelligence, and scientific and technical intelligence.)
- **tempo** The rate of military action; controlling or altering that rate is a necessary means to initiative. All military operations alternate between action and pauses as opposing forces battle one another and fight friction to mount and execute operations at the time and place of their choosing. See FM 100-5.
- **terrain analysis** (JP 1-02, NATO) The collection, analysis, evaluation, and interpretation of geographic information on the natural and manmade features of the terrain, combined with other relevant factors, to predict the effect of the terrain on military operations. See FMs 34-3 and 34-130.
- **terrain flight** (JP 1-02, NATO) Flight close to the Earth's surface during which airspeed, height, and/or altitude are adapted to the contours and cover of the ground in order to avoid enemy detection and fire. See FM 1-111.
- **terrain following** Terrain flying that includes low-level, contour, and nap-of-the-earth flight techniques. See FMs 1-111 and 100-103.
- **terrain management 1.** The process of allocating terrain by establishing areas of operation, designating assembly areas, and specifying locations for units and activities to deconflict activities that might interfere with each other, for example, ensuring artillery firing units are not placed within air corridors. **2.** In rear operations, the process includes grouping units together to form bases, and designating a base cluster as necessary. See FMs 1-111, 6-20, 7-3, 7-30, 71-100, and 100-15.
- **terrain reinforcement** The development of terrain using obstacles to degrade enemy mobility or to enhance friendly survivability through the construction of fighting positions and cover. (See also countermobility operations and survivability operations.)
- **terrorism** (JP 1-02) The calculated use of violence or threat of violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological. (See also antiterrorism (AT) and counterterrorism (CT).) See FM 100-20.
- **terrorist** (JP 1-02) An individual who uses violence, terror, and intimidation to achieve a result. See FM 100-20.
- terrorist threat condition (THREATCON) (JP 1-02) A Chairman of the Joint Chiefs of Staff-approved program standardizing the Military Services' identification of and recommended responses to terrorist threats against US personnel and facilities. This program facilitates inter-Service coordination and support for antiterrorism activities. There are four THREATCONs above normal: a. THREATCON ALPHA This condition applies when there is a general threat of possible terrorist activity against personnel and facilities, the nature and extent of which are unpredictable, and circumstances do not justify full implementation of THREATCON BRAVO measures. However, it may be necessary to implement certain measures from higher THREATCONs resulting from intelligence received or as a deterrent. The measures in this THREATCON must be capable of being maintained indefinitely. b. THREATCON BRAVO This condition applies when an increased and more predictable threat of terrorist activity exists. The measures in this THREATCON must be capable of being maintained for weeks without causing undue hardship, affecting operational capability, and aggravating relations with local authorities. c. THREATCON

- **CHARLIE** This condition applies when an incident occurs or intelligence is received indicating some form of terrorist action against personnel and facilities is imminent. Implementation of measures in this THREATCON for more than a short period probably will create hardship and affect the peacetime activities of the unit and its personnel. **d. THREATCON DELTA** This condition applies in the immediate area where a terrorist attack has occurred or when intelligence has been received that terrorist action against a specific location or person is likely. Normally, this THREATCON is declared as a localized condition. (See also antiterrorism (AT).) See FM 100-20.
- **theater** (JP 1-02) The geographical area outside the continental United States for which a commander of a combatant command has been assigned responsibility. See FMs 100-5 and 100-7.
- theater airlift (intratheater airlift) (Army) The movement of personnel and materiel by aircraft within a theater of operations that provides air movement and delivery of combat troops and supplies directly into objective areas through airlanding, extraction, airdrop, or other delivery techniques; the use of air transport in direct support of airborne assault, carriage of air transported forces, tactical air supply, evacuation of casualties from forward airfields, and special operations. See FMs 8-10-6, 100-5, and 100-17.
- **theater missile** (**TM**) (JP 1-02) A missile, which may be a ballistic missile, a cruise missile, or an air-to-surface missile (not including short-range, non-nuclear, direct-fire missiles, bombs, or rockets such as Maverick or wire-guided missiles), whose target is within a given theater of operation. See FM 44-100 and JP 3-01.5.
- theater missile defense (TMD) Applies to the identification, integration, and employment of forces supported by other theater and national capabilities, to detect, identify, locate, track, minimize the effects of, or destroy enemy theater missiles (TMs). This includes the destruction of TMs on the ground and in flight, their ground-based launchers and supporting infrastructure; TM-capable ships and vessels in port or at sea; and enemy aircraft armed with air-to surface missiles. TMD comprises four pillars necessary for a complete TM defense: passive defense, active defense, attack operations, and C⁴I measures. See FM 44-100 and JP 3-01.5.
- **theater missile defense system** Applies to a system or systems with applicable capabilities that may be used to support passive defense measures, active defense measures, attack operations capabilities, and the command, control, communications, computers, and intelligence and countermeasures required to counter the missile threat. See FM 44-100.
- **thermal crossover** (JP 1-02) The natural phenomenon which normally occurs twice daily when temperature conditions are such that there is a loss of contrast between two adjacent objects on infrared imagery. See FMs 7-91, 17-12, and 23-1.
- **thermal radiation** (JP 1-02, NATO) **1.** The heat and light produced by nuclear explosion. (DOD) **2.** Electromagnetic radiations emitted from a heat or light source as a consequence of its temperature; it consists essentially of ultraviolet, visible, and infrared radiations. See JPs 3-12.2 and 3-12.3.
- **thorough decontamination** (JP 1-02, NATO) Decontamination carried out by a unit, with or without external support, to reduce contamination on personnel, equipment, materiel and/or working areas to the lowest possible levels, to permit the partial or total removal of individual protective equipment, and to maintain operations with minimum degradation. This may include terrain decontamination beyond the scope of operational decontamination. (See also decontamination, immediate decontamination, and operational decontamination.) See FM 3-5.

- **throughput** (JP 1-02) The average quantity of cargo and passengers that can pass through a port on a daily basis from arrival at the port to loading onto a ship or plane, or from the discharge from a ship or plane to the exit (clearance) from the port complex. Throughput is usually expressed in measurement tons, short tons, or passengers. Reception and storage limitation may affect final throughput. See FM 100-10.
- **throughput distribution** The bypassing of one or more intermediate supply echelons in the supply system to avoid multiple handling. See FM 100-10.
- time of attack (JP 1-02) The hour at which the attack is to be launched. If a line of departure is prescribed, it is the hour at which the line is to be crossed by the leading elements of the attack. (See also H-hour.) See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, and 101-5.
- **time of flight** (JP 1-02, NATO) In artillery and naval gunfire support, the time in seconds from the instant a weapon is fired, launched, or released from the delivery vehicle or weapons system to the instant it strikes or detonates. See FMs 6-series and 7-90.
- **time-phased force and deployment data (TPFDD)** (JP 1-02) The Joint Operation Planning and Execution System data base portion of an operation plan; it contains time-phased force data, nonunit-related cargo and personnel data, and movement data for the operation plan, including: a. In-place units. **b.** Units to be deployed to support the operation plan with a priority indicating the desired sequence for their arrival at the port of debarkation. **c.** Routing of forces to be deployed. **d.** Movement data associated with deploying forces. **e.** Estimates of nonunit-related cargo and personnel movements to be conducted concurrently with the deployment of forces. **f.** Estimate of transportation requirements that must be fulfilled by common-user lift resources, as well as those requirements that can be fulfilled by assigned or attached transportation resources. See JP 5-0.
- **time-phased force and deployment list (TPFDL)** (JP 1-02) Appendix 1 to Annex A of the operation plan. It identifies types and/or actual units required to support the operation plan and indicates origin and ports of debarkation or ocean area. It may also be generated as a computer listing from the time-phased force and deployment data.
- time on target (TOT) (JP 1-02) 1. Time at which aircraft are scheduled to attack/photograph the target.

 2. The actual time at which aircraft attack/photograph the target.

 3. The time at which a nuclear detonation is planned at a specified desired ground zero. See FM 6-series.
- **time zone** A geographical area having the exact same time (clockwise). These areas are designated from east to west from ZULU time or Greenwich Mean Time and expressed by a letter of the alphabet.
- **tolerance dose** (JP 1-02) The amount of radiation which may be received by an individual within a specified period with negligible results.
- **topographical crest** Highest point of a hill, ridge, or mountain. (See also military crest.) See FM 21-26.
- **topographic map** (JP 1-02) A map which presents the vertical position of features in measurable form as well as their horizontal positions. See FM 21-26.
- **total asset visibility** (**TAV**) The ability to identify the location of equipment, supplies, or personnel during in-processing and while in transit or in storage. See FM 55-12.

total mobilization. See mobilization.

- **toxin agent** (JP 1-02) A poison formed as a specific secretion product in the metabolism of a vegetable or animal organism as distinguished from inorganic poisons. Such poisons can also be manufactured by synthetic processes. See FM 3-9 and 3-100.
- track (JP 1-02) 1. A series of related contacts displayed on a plotting board. 2. To display or record the successive positions of a moving object. 3. To lock onto a point of radiation and obtain guidance therefrom.
 4. To keep a gun properly aimed, or to point continuously a target-locating instrument at a moving target.
 5. The actual path of an aircraft above, or a ship on, the surface of the Earth. The course is the path that is planned; the track is the path that is actually taken.
 6. One of the two endless belts on which a full-track or half-track vehicle runs.
 7. A metal part forming a path for a moving object, e.g., the track around the inside of a vehicle for moving a mounted machine gun.
- **tracking** (JP 1-02, NATO) **1.** Precise and continuous position-finding of targets by radar, optical, or other means. (DOD) **2.** In air intercept, a code meaning, "By my evaluation, target is steering true course indicated."
- **trafficability** (JP 1-02, NATO) Capability of terrain to bear traffic. It refers to the extent to which the terrain will permit continued movement of any and/or all types of traffic. See FMs 5-36, 34-3, and 34-130.
- **traffic control post (TCP)** A place at which traffic is controlled either by military police or by mechanical means. See FMs 17-95, 19-1, 55-10, 55-30, 71-100, 71-123, 100-15, and 100-40. **3-40**
- trailer transfer point A location where trailers are transferred from one carrier to another while *en route*. (See also logistics release point (LRP).) See FM 55-30. 3-40
- **trail party** The last march unit in a march serial, usually consisting of priority maintenance and recovery vehicles. See also unit maintenance collection point (UMCP). See FM 63-2.
- train (Army) 1. A service force or group of service elements which provides logistic support, that is, the vehicles and operating personnel which furnish supply, evacuation, and maintenance services to a land unit.
 2. Bombs dropped in short intervals or sequence. (See also unit trains, combat trains, and field trains.) See FMs 17-95 and 71-123.
- **traveling** A movement technique used when speed is necessary and contact with enemy forces is not likely. All elements of the unit move simultaneously with the unit leader located where he can best control his unit. (See also movement technique.) See FM 7-7, 7-8, 7-10, 17-95, and 17-98.
- **traveling overwatch** A movement technique used when contact with enemy forces is possible. The lead element and trailing element are separated by a short distance which varies with the terrain. The trailing element moves at variable speeds and may pause for short periods to overwatch the lead element. It keys its movement to terrain and the lead element. The trailing element overwatches at such a distance that should the enemy engage the lead element, it will not prevent the trailing element from firing or moving to support the lead element. (See also movement technique.) See FM 7-7, 7-8, 7-10, 17-95, and 17-98.
- **traverse** (JP 1-02, NATO) 1. To turn a weapon to the right or left on its mount. 2. A method of surveying in which lengths and directions of lines between points on the earth are obtained by or from field measurements, and used in determining positions of the points. (Army) To move across terrain. See FMs 7-91, 17-12, and 23-1.

- **triage** (JP 1-02, NATO) The evaluation and classification of casualties for purposes of treatment and evacuation. It consists of the immediate sorting of patients according to type and seriousness of injury, and likelihood of survival, and the establishment of priority for treatment and evacuation to assure medical care of the greatest benefit to the largest number. See FM 8-series.
- **trigger**—1. Event or time-oriented criteria used to initiate planned actions directed toward achieving surprise and inflicting maximum destruction on the enemy. 2. A designated point or points (selected along identifiable terrain) in an engagement area used to mass fires at a predetermined range.
- **troop safety (nuclear)** (JP 1-02) An element which defines a distance from the proposed burst location beyond which personnel meeting the criteria described under degree of risk will be safe to the degree prescribed. (Army) It is expressed as a combination of a degree of risk and vulnerability category. (See also emergency risk (nuclear), negligible risk (nuclear), unwarned exposed, and warned protected.) See FM 100-30, JPs 3-12.2, and 3-12.3.
- **true azimuth** Direction measured as an angle to the east of the north star (Polaris). (See also azimuth.) See FM 21-26.
- true north (JP 1-02, NATO) The direction from an observer's position to the geographic North Pole. The north direction of any geographic meridian. See FM 21-26.
- **turn** A tactical obstacle effect that integrates fire planning and obstacle effort to divert an enemy formation off one avenue of approach to an adjacent avenue of approach, or into an engagement area. See FM 90-7. 3-31
- **turnaround** (JP 1-02, NATO) The length of time between arriving at a point and being ready to depart from that point. It is used in this sense for the loading, unloading, refueling and rearming, where appropriate, of vehicles, aircraft, and ships. See FMs 1-111 and 55-30.
- **turning movement** (JP 1-02, NATO) A variation of the envelopment in which the attacking force passes around or over the enemy's principal defensive positions to secure objectives deep in the enemy's rear to force the enemy to abandon his position or divert major forces to meet the threat. (See also choices of maneuver.) See FMs 100-5 and 100-15.
- **turret-down** Fighting position in which the entire vehicle is behind cover, but the commander can still observe to the front from the turret hatch or cupola. (See also hide and hull down.) See FMs 7-8, 7-91, 17-12, and 23-1.
- **twilight** The period of incomplete darkness following sunset and preceding sunrise. Twilight is designated as civil, nautical, or astronomical, as the darker limit occurs when the center of the sun is 6, 12, or 18 degrees, respectively, below the celestial horizon. (See also begin morning nautical twilight (BMNT).) See FM 34-130.
- **type of operation** A broad category of tactical activities, each with specific doctrinal tenets. Reconnaissance, security, entry operations, offensive operations, defensive operations, retrograde operations, troop movement, and specialized operations are specific types of operations. (See also form of tactical operations, choices of maneuver, and tactical task.) See FM 100-40.

U

uncertain environment. See operational environment.

- **uncommitted force** A force that is not in contact with an enemy and is not already assigned a specific mission or course of action which would preclude its use elsewhere.
- unconventional warfare (UW) (JP 1-02) A broad spectrum of military and paramilitary operations, normally of long duration, predominantly conducted by indigenous or surrogate forces who are organized, trained, equipped, supported, and directed in varying degrees by an external source. It includes guerrilla warfare and other direct offensive, low visibility, covert, or clandestine operations, as well as the indirect activities of subversion, sabotage, intelligence activities, and evasion and escape. (Army) A broad spectrum of military and paramilitary operations conducted in enemy-held, enemy-controlled, or politically sensitive territory. UW includes guerrilla warfare, evasion and escape, subversion, sabotage, direct action missions, and other operations of a low-visibility, covert, or clandestine nature. These interrelated aspects of UW may be prosecuted singly or collectively by predominantly indigenous personnel, usually supported and directed in varying degrees by an external source during all conditions of war or peace. (See military operations other than war (MOOTW).) See FM 100-20.
- **underground** A covert unconventional warfare organization established to operate in areas denied to the guerrilla forces or conduct operations not suitable for guerrilla forces.
- **unexploded explosive ordnance (UXO)** (JP 1-02, NATO) Explosive ordnance which has been primed, fused, armed, or otherwise prepared for action, and which has been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material, and remains unexploded either by malfunction or design or for any other cause. 3-33
- unified command (JP 1-02) A command with a broad continuing mission under a single commander and composed of significant assigned components of two or more Military Departments, and which is established and so designated by the President, through the Secretary of Defense with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Also called unified combatant command. See FM 100-5 and JP 5-0.
- unit (JP 1-02, NATO) 1. Any military element whose structure is prescribed by competent authority, such as a table of organization and equipment; specifically, part of an organization. 2. An organization title of a subdivision of a group in a task force. 3. A standard or basic quantity into which an item of supply is divided, issued, or used. In this meaning, also called unit of issue. 4. With regard to reserve components of the Armed Forces, denotes a Selected Reserve unit organized, equipped, and trained for mobilization to serve on active duty as a unit or to augment or be augmented by another unit. Headquarters and support functions without wartime missions are not considered units. (Army) This first level of command (company, troop, or battery) upon which all other higher formations and organizations are built. (See also organization.)
- **unit distribution** A method of distributing supplies by which the receiving unit is issued supplies in its own area with transportation furnished by the issuing agency.
- **United Nations Protection Force (UNPROFOR)** A tailored, temporary force, comprised of joint and/or multinational forces or agencies under the command of the United Nations Secretary-General, that monitors or verifies compliance with United Nations Resolutions by various parties or ensures humanitarian care is provided to noncombatants. These forces are equipped with light defensive weapons and are authorized to use force only for self-defense. (See also implementation force (IFOR).) See FMs 100-20 and 100-23.

- unit maintenance collection point (UMCP) A location or a series of locations, operated by a battalion maintenance platoon, that is the nearest point to the combat unit to which equipment can be recovered, and where limited parts are available, and some repairs can be performed. See FM 72-1. 3-40
- unit trains Combat service support personnel and equipment organic or attached to a force that provides support such as supply, evacuation, and maintenance services. Unit trains, whether or not echeloned, are under unit control and no portion of them is released to the control of a higher headquarters. Trains are normally echeloned into combat and field trains. (See also combat trains and field trains.)

 4-23
- unity of command One of the nine principles of war. All forces operate under one responsible commander who possesses requisite authority to direct forces in pursuit of a common unified purpose. (See also maneuver, offensive, objective, surprise, economy of force, mass, security, and simplicity.) See FM 100-5.
- **unity of effort** Coordination and cooperation among all forces, not necessarily part of the same command structure toward a commonly recognized objective. See FM 100-5.
- Universal Time (ZULU) (JP 1-02) A measure of time that conforms, within a close approximation, to the mean diurnal rotation of the Earth and serves as the basis of civil timekeeping. Universal Time (UTI) is determined from observations of the stars, radio sources, and also from ranging observations of the Moon and artificial Earth satellites. The scale determined directly from such observations is designated Universal Time Observed (UTO); it is slightly dependent on the place of observation. When UTO is corrected for the shift in longitude of the observing station caused by polar motion, the time scale UTI is obtained. When an accuracy better than one second is not required, Universal Time can be used to mean Coordinated Universal Time (UTC). Formerly called Greenwich Mean Time. (See also ZULU time.) See FM 101-5.
- universal transverse mercator grid (JP 1-02, NATO) A grid coordinate system based on the transverse mercator projection, applied to maps of the Earth's surface extending to 84 degrees N and 80 degrees S latitudes. See FM 21-26.
- **unknown** (JP 1-02) **1.** A code meaning information not available. **2.** An unidentified target. (Army) An aircraft or ship which has not been determined to be hostile, friendly, or neutral using identification friend or foe (IFF) and other techniques, but which must be tracked by air defense or naval engagement systems.
- **unobserved fire** (JP 1-02, NATO) Fire for which the points of impact or burst are not observed. See FM 6-series, 7-90, 7-91, 17-12, and 23-1.
- **unwarned exposed** (JP 1-02, NATO) The vulnerability of friendly forces to nuclear weapon effects. In this condition, personnel are assumed to be standing in the open at burst time, but have dropped to a prone position by the time the blast wave arrives. They are expected to have areas of bare skin exposed to direct thermal radiation, and some personnel may suffer dazzle. (See also warned exposed and warned protected.) See FM 100-30, JPs 3-12.2, and 3-12.3.
- up (JP 1-02, NATO) In artillery and naval gunfire support: 1. A term used in a call for fire to indicate that the target is higher in altitude than the point which has been used as a reference point for the target location.
 2. A correction used by an observer or a spotter in time fire to indicate that an increase in height of burst is desired. (Army) Indirect fire, a term used to move the point of aim higher than the previous point of aim, usually expressed in mils. See FMs 6-series, 7-90, 7-91, 17-12, and 23-1.

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- **vaccine** A preparation of killed or attenuated infective or toxic agent used as an inoculation to produce active artificial immunity. See FM 3-9.
- V-agents Persistent, highly toxic nerve agents absorbed primarily through the skin. See FM 3-9.
- vector 1. A carrier, especially the animal or intermediate host, that carries a pathogen from one host to another. See FM 3-9.
 2. An angle of direction expressed in degrees or mils to a target or a specified point.
- **vee formation** A unit formation with subordinate elements arranged in a V formation with the point facing away from the templated enemy. This formation is hard to reorient and difficult to control in heavily wooded areas but provides good firepower to the front and flanks. (See also formation, movement formation, and wedge formation.) See FMs 7-7, 7-8, and 7-20.
- **vehicle distance** (JP 1-02, NATO) The clearance between vehicles in a column which is measured from the rear of one vehicle to the front of the following vehicle. (See also march column, march serial, and march unit.) See FMs 55-10, 55-30, and 101-5.
- wehicle washdown Technique used for flushing contamination off equipment surfaces to limit the spreading and transferring of contamination. Along with mission-oriented protective posture (MOPP) gear exchange, it is part of decontamination operations. See FM 3-5.
- **versatility** The ability of units to meet diverse mission requirements and for commanders to shift focus, tailor forces, and move from one form or type of operation to another rapidly and efficiently. It is also the ability to be multifunctional and to operate across the full range of military operations. See FM 100-5.
- **vertical envelopment** (JP 1-02) A tactical maneuver in which troops, either air-dropped or air-landed, attack the rear and flanks of a force, in effect cutting off or encircling the force. (See also air assault and choices of maneuver.)
- vesicant chemical agent that acts on the eyes, lungs, and skin, capable of producing blisters. See FM 3-9.
- visual flight rules (VFR) A meteorological condition that allows pilots to control aircraft orientation and attitude using visual references (the ground and the natural horizon). When weather conditions are good enough to allow pilots to safely operate their aircraft without the control requirements of instrument flight rules (IFR) flight procedures, and weather minimum conditions are above the regulatory requirements for VFR flight, pilots may operate under VFR procedures. See FM 1-111.
- vulnerability analysis A process to determine which friendly elements are within the radius of vulnerability (RV) for a proposed friendly weapon of mass destruction target and whether they will be exposed to a radiation risk greater than emergency risk. (See also emergency risk (nuclear), radius of vulnerability (RV) (nuclear), and troop safety (nuclear).) See FMs 3-3, 3-100, 100-30, JPs 3-12.2, and 3-12.3

W

- walking patient (JP 1-02, NATO) A patient not requiring a litter while in transit. (See also casualty and patient.) See FM 8-series.
- war game (JP 1-02, NATO) A simulation, by whatever means, of a military operation involving two or more opposing forces, using rules, data, and procedures designed to depict an actual or assumed real life situation.

- war gaming A step-by-step process of action, reaction, and counteraction for visualizing the execution of each friendly course of action (COA) in relation to enemy COAs and reactions. It explores the possible branches and sequels to the primary plan resulting in a final plan and decision points for critical actions. (See also battlefield visualization.) See FMs 71-100, 100-5, 100-15, and 101-5.
- warned exposed (JP 1-02, NATO) The vulnerability of friendly forces to nuclear weapon effects. In this condition, personnel are assumed to be prone with all skin covered and with thermal protection at least that provided by a two-layer summer uniform. (See also unwarned exposed and warned protected.) See FM 100-30, JPs 3-12.2, and 3-12.3.
- warned protected (JP 1-02, NATO) The vulnerability of friendly forces to nuclear weapon effects. In this condition, personnel are assumed to have some protection against heat, blast, and radiation such as that afforded in closed armored vehicles or crouched in fox holes with improvised overhead shielding. See also unwarned exposed and warned exposed. See FM 100-30, JPs 3-12.2, and 3-12.3.
- warning order (WARNO) (JP 1-02, NATO) 1. A preliminary notice of an order or action which is to follow. 2. A crisis action planning directive issued by the Chairman of the Joint Chiefs of Staff that initiates the development and evaluation of courses of action by a supported commander and requests that a commander's estimate be submitted. 3. A planning directive that describes the situation, allocates forces and resources, establishes command relationships, provides other initial planning guidance, and initiates subordinate unit mission planning. See FMs 1-111, 6-20, 7-20, 7-30, 17-95, 71-100, 71-123, 100-15, 100-40, 101-5, and JP 5-0.
- wave(JP 1-02, NATO) A formation of forces, landing ships, craft, amphibious vehicles or aircraft required to beach or land about the same time. Can be classified as to type, function, or order as shown: a. Assault wave; b. Boat wave; c. Helicopter wave; d. Numbered wave; e. On-call wave; f. Scheduled wave.
- way point (JP 1-02) In air operations, a point or a series of points in space to which an aircraft may be vectored. (Army) A designated point or series of points loaded and stored in a global positioning system or other electronic navigational aid system to facilitate movement.
- **weapon control status** The degree of fire control imposed upon Army units having assigned, attached, or organic air defense weapons. (See air defense weapon control status.)
- weapon engagement zone (WEZ) (JP 1-02) In air defense, airspace of defined dimensions within which the responsibility for engagement of air threats normally rests with a particular weapon system. a. fighter engagement zone (FEZ). In air defense, that airspace of defined dimensions within which the responsibility for engagement of air threats normally rests with fighter aircraft. b. high-altitude missile engagement zone (HIMEZ). In air defense, that airspace of defined dimensions within which the responsibility for engagement zone (LOMEZ). In air defense, that airspace of defined dimensions within which the responsibility for engagement of air threats normally rests with low- to medium-altitude surface-to-air missiles. d. short-range air defense engagement zone (SHORADEZ). In air defense, that airspace of defined dimensions within which the responsibility for engagement of air threats normally rests with short-range air defense weapons. It may be established within a low- or high-altitude missile engagement zone. e. joint engagement zone (JEZ). In air defense, that airspace of defined dimensions within which multiple air defense systems (surface-to-air missiles and aircraft) are simultaneously employed to engage air threats.

- weapons free (JP 1-02, NATO) In air defense, a weapon control order imposing a status whereby weapons systems may be fired at any target not positively recognized as friendly. (See also weapons hold, weapons tight, and air defense weapon control status.) See FM 44-100.
- weapons free zone (JP 1-02) An air defense zone established for the protection of key assets or facilities, other than air bases, where weapon systems may be fired at any target not positively recognized as friendly. (See also weapons free and air defense weapon control status.) See FMs 100-103 and 44-100.
- weapons hold (JP 1-02, NATO) In air defense, a weapon control order imposing a status whereby weapons systems may only be fired in self-defense or in response to a formal order. (See also weapons free, weapons tight, and air defense weapon control status.) See FM 44-100.
- **weapon signature** Any smoke, vapor trail, noise, heat, flash, tracer, or flight characteristic that denotes a specific weapon system. (See also signature.)
- weapons of mass destruction (JP 1-02) In arms control usage, weapons that are capable of a high order of destruction and/or of being used in such a manner as to destroy large numbers of people. Can be nuclear, chemical, biological, and radiological weapons, but excludes the means of transporting or propelling the weapon where such means is a separable and divisible part of the weapon.
- weapons tight (JP 1-02, NATO) In air defense, a weapon control order imposing a status whereby weapons systems may be fired only at targets recognized as hostile. (See also air defense, weapons free, and weapons hold.)
- **weathering** The process of decontamination by natural evaporation or decomposition of the chemical agent. See FM 3-100.
- wedge formation A unit formation with subordinate elements in a V formation with the point toward the suspected or templated enemy positions. This facilitates control and transition to the assault (line formation). The wedge provides maximum firepower forward and good firepower to the flanks. (See also vee formation and formation.) See FMs 7-7, 7-8 and 7-20.
- white lists Listings that identify and locate individuals who have been identified as being of intelligence or counterintelligence interest and who are expected to be able to provide information or assistance in existing or new intelligence areas of interest. The individuals are usually in accordance with, or favorably inclined toward, US policies. Contributions are based on a voluntary and cooperative attitude. D-8
- white propaganda (JP 1-02) Propaganda disseminated and acknowledged by the sponsor or by an accredited agency thereof.
- withdrawal operation (JP 1-02, NATO) A planned operation in which a force in contact disengages from an enemy force. (Army) A type of retrograde where a force in contact plans to disengage from the enemy and move in a direction away from the enemy. (See retrograde.)
- world geographic reference system (GEOREF) (JP 1-02) A worldwide position reference system that may be applied to any map or chart graduated in latitude and longitude regardless of projection. It is a method of expressing latitude and longitude in a form suitable for rapid reporting and plotting.
- wounded in action (WIA) (JP 1-02) A casualty category applicable to a hostile casualty, other than the victim of a terrorist activity, who has incurred an injury due to an external agent or cause. The term

encompasses all kinds of wounds and other injuries incurred in action, whether there is a piercing of the body, as in a penetration or perforated wound, or none, as in the contused wound. These include fractures, burns, blast concussions, all effects of biological and chemical warfare agents, and the effects of an exposure to ionizing radiation or any other destructive weapon or agent. The hostile casualty's status may be very seriously ill or injured, seriously ill or injured, incapacitating illness or injury, or not seriously injured.

wrong (JP 1-02) — A proword meaning, "Your last transmission was incorrect, the correct version is "_____."

X

- **X-hour** The unspecified time that commences unit notification for planning and deployment preparation in support of potential contingency operations that do not involve rapid, no-notice deployment.
- **X-hour sequence** Extended sequence of events initiated by X-hour that allows a unit to focus on planning for a potential contingency operation, to include preparations for deployment.

Ζ

- **zone of action** (JP 1-02, NATO) A tactical subdivision of a larger area, the responsibility for which is assigned to a tactical unit; generally applied to offensive action. (Army) The offensive operational area assigned to a unit or commander that is defined by a forward boundary, rear boundary, lateral boundaries, and a coordinating altitude. (See also sector.)
- zone of fire (Army) A maneuver control measure usually utilized during amphibious operations that is an area within which designated ground fire support units and naval gunfire support ships deliver, or are prepared to deliver, fire support. Fire may be observed or unobserved. The zone of fire is used to coordinate the efforts of the fire support ships and units with each other and with the ground scheme of maneuver. The size and location of a zone of fire is based on the ground force boundaries; the area in which the supporting ships and units can provide effective fire; visibility; range of the ship's guns; and the height of intervening terrain. (See also fire support area (FSA), fire support station (FSS), and naval gunfire support (NGFS).) See FM 6-series.
- zone reconnaissance A directed effort to obtain detailed information concerning all routes, obstacles (to include chemical or radiological contamination), terrain, and enemy forces within a zone defined by boundaries. A zone reconnaissance normally is assigned when the enemy situation is vague or when information concerning cross-country trafficability is desired. (See also reconnaissance (recon) (recce).)
- **zone** of separation (**ZOS**) That space controlled by a third-party neutral force that enforces the parameters specified by international agreement, ceasefire agreement, or United Nations mandate. **D-10**
- **ZULU time** A measure of time that conforms, within a close approximation, to the mean diurnal rotation of the Earth and serves as the basis of civil timekeeping. ZULU time is determined from observations of the stars, radio sources, and also from ranging observations of the Moon and artificial Earth satellites. The scale determined directly from such observations is designated Universal Time Observed (UTO); it is slightly dependent on the place of observation. When ZULU time is corrected for the shift in longitude of the observing station caused by polar motion, the time scale ZULU time is obtained. Formerly called Greenwich Mean Time (See also Universal Time.) See FM 101-5.